100th Congress
1st Session

JOINT COMMITTEE PRINT

S. PRT.
100-47

U.S. ARMS CONTROL AND DISARMAMENT AGENCY 1986 ANNUAL REPORT

MESSAGE

FROM

THE PRESIDENT OF THE UNITED STATES

TRANSMITTING

THE 25TH ANNUAL REPORT OF THE U.S. ARMS CONTROL AND DISARMAMENT AGENCY, COVERING CALENDAR YEAR 1986, PURSUANT TO SECTION 50 OF THE ARMS CONTROL AND DISARMAMENT ACT, AS AMENDED (75 STAT. 639, 89 STAT. 760)

SEPTEMBER 1987

Printed for the use of the Committees on Foreign Relations and Foreign Affairs of the Senate and the House of Representatives respectively

---

U.S. GOVERNMENT PRINTING OFFICE
69-711 WASHINGTON : 1987

For sale by the Superintendent of Documents, Congressional Sales Office
U.S. Government Printing Office, Washington, DC 20402

H382-21
S382-10

COMMITTEE ON FOREIGN RELATIONS

CLAIBORNE PELL, Rhode Island, *Chairman*

JOSEPH R. BIDEN, Jr., Delaware
PAUL S. SARBANES, Maryland
ALAN CRANSTON, California
CHRISTOPHER J. DODD, Connecticut
JOHN F. KERRY, Massachusetts
PAUL SIMON, Illinois
TERRY SANFORD, North Carolina
BROCK ADAMS, Washington
DANIEL P. MOYNIHAN, New York

JESSE HELMS, North Carolina
RICHARD G. LUGAR, Indiana
NANCY L. KASSEBAUM, Kansas
RUDY BOSCHWITZ, Minnesota
LARRY PRESSLER, South Dakota
FRANK H. MURKOWSKI, Alaska
PAUL S. TRIBLE, Jr., Virginia
DANIEL J. EVANS, Washington
MITCH McCONNELL, Kentucky

GERYLD B. CHRISTIANSON, *Staff Director*
JAMES P. LUCIER, *Minority Staff Director*

COMMITTEE ON FOREIGN AFFAIRS

DANTE B. FASCELL, Florida, *Chairman*

LEE H. HAMILTON, Indiana
GUS YATRON, Pennsylvania
STEPHEN J. SOLARZ, New York
DON BONKER, Washington
GERRY E. STUDDS, Massachusetts
DAN MICA, Florida
HOWARD WOLPE, Michigan
GEO. W. CROCKETT, Jr., Michigan
SAM GEJDENSON, Connecticut
MERVYN M. DYMALLY, California
TOM LANTOS, California
PETER H. KOSTMAYER, Pennsylvania
ROBERT G. TORRICELLI, New Jersey
LAWRENCE J. SMITH, Florida
HOWARD L. BERMAN, California
MEL LEVINE, California
EDWARD F. FEIGHAN, Ohio
TED WEISS, New York
GARY L. ACKERMAN, New York
MORRIS K. UDALL, Arizona
CHESTER G. ATKINS, Massachusetts
JAMES McCLURE CLARKE, North Carolina
JAIME B. FUSTER, Puerto Rico
JAMES H. BILBRAY, Nevada
WAYNE OWENS, Utah
FOFO I.F. SUNIA, American Samoa

WILLIAM S. BROOMFIELD, Michigan
BENJAMIN A. GILMAN, New York
ROBERT J. LAGOMARSINO, California
JIM LEACH, Iowa
TOBY ROTH, Wisconsin
OLYMPIA J. SNOWE, Maine
HENRY J. HYDE, Illinois
GERALD B.H. SOLOMON, New York
DOUG BEREUTER, Nebraska
ROBERT K. DORNAN, California
CHRISTOPHER H. SMITH, New Jersey
CONNIE MACK, Florida
MICHAEL DEWINE, Ohio
DAN BURTON, Indiana
JAN MEYERS, Kansas
JOHN MILLER, Washington
DONALD E. "BUZ" LUKENS, Ohio
BEN BLAZ, Guam

JOHN J. BRADY, Jr., *Chief of Staff*
STEVEN K. BERRY, *Minority Chief of Staff*

FOREWORD

Twenty-five years ago, our Nation's leaders, mindful of the threat to world peace posed by growing and spreading nuclear arsenals, enacted legislation creating the Arms Control and Disarmament Agency. To this day, ACDA remains the only independent governmental agency in the world charged with the formulation, implementation, and support of arms control and disarmament efforts.

The Agency's first 25 years have been marked by a great deal of frustration as various arms control initiatives have failed to gain support within our own Government or have encountered obstacles in bilateral negotiations. Nonetheless, the Agency has managed to attract and retain a solid core of professionals at the working level. These professionals are fully capable of leading the resolution of substantive issues once given the authority at the political level to do so.

The Agency has never attained the bureaucratic power some hoped for and others feared 25 years ago. With regard to possible excessive power, it is instructive to recall that a section of the Arms Control and Disarmament Act of 1961 on policy formulation incorporated the safeguard that no action was to be taken under the statute or any other law "that will obligate the United States to drain or to reduce or to limit" its armaments or Armed Forces without the approval of the Senate or the whole Congress. Another section established a General Advisory Committee to advise the Director. It was reassuring to some that the Advisory Committee could make sure that things did not yet get out of hand.

In the recent years since, it has become quite clear that any concerns that ACDA would exert excessive power were needless. We understand now that arms control can never be imposed. It must be achieved through consensus. In addition, successful arms control ventures must be, and must be seen to be, consistent with our national security interests.

Despite recurring problems of personnel shortages, budgetary differences, and bureaucratic neglect, the Agency had endured, if it has not always prospered. We and others have taken steps over the years to strengthen the Agency. More needs to be done. The Agency has yet to realize the potential envisioned when its charter was drawn up 25 years ago. We now understand what the Agency cannot do, what it does well, and what it could do better with vigorous and skilled leadership and the necessary support.

The achievements in the Agency's first 20 years were considerable, beginning with the Limited Test Ban Treaty by the Kennedy administration. Since then, there have been such major accords as its Outer Space and Non-Proliferation Treaties during the Johnson administration; the Seabed Arms Control Treaty, the Biological Weapons Convention, the Threshold Test Ban Treaty, and the SALT I Interim Agreement and Anti-Ballistic Missile Treaty during the Nixon administration; the Peaceful Nuclear Explosions Treaty and the Environmental Modification Treaty during the Ford administration; and the SALT II Treaty during the Carter administration. At present, we hope for a successful fruition of talks in Geneva on reducing or eliminating intermediate-range nuclear missiles, reduction of strategic offensive weapons, and control of space weapons.

Clearly, the task of meaningful arms control is far from complete. There has been a serious beginning. At present, there are opportunities waiting to be seized. With perseverance, arms control can be of central importance in shaping a truly better and safer world for the United States and other nations.

As in the past, the views expressed in this report are those of the Arms Control and Disarmament Agency and do not necessarily reflect the views of the Senate Committee on Foreign Relations or the House Committee on Foreign Affairs.

CLAIBORNE PELL,
Chairman, Committee on Foreign Relations.

DANTE B. FASCELL,
Chairman, Committee on Foreign Affairs.

LETTER OF SUBMITTAL

U.S. ARMS CONTROL AND DISARMAMENT AGENCY,
January 27, 1987.

MR. PRESIDENT: I am pleased to submit for your transmittal to the Congress, as required by the Arms Control and Disarmament Act (22 U.S.C. 2590), this twenty-sixth Annual Report of the United States Arms Control and Disarmament Agency, which, during 1986, marked a quarter century of operations.

Sincerely,

KENNETH L. ADELMAN.

Enclosure.

LETTER OF TRANSMITTAL

FEBRUARY 9, 1987.

To the Congress of the United States:

This 1986 United States Arms Control and Disarmament Agency Annual Report reviews all the government's 1986 arms control activities as well as ACDA's role in them. This relatively small agency plays a key role in the evolution and implementation of arms control policies that contribute importantly to our Nation's security. I know that you share my enthusiasm for ACDA, which celebrated its twenty-fifth anniversary in 1986.

You will find in the pages of the Report detailed material on the three rounds of Nuclear and Space Talks and on the talks that General Secretary Gorbachev and I had in Reykjavik, October 11-12. Details on progress made at the Conference on Disarmament, the Conference on Security and Cooperation in Europe, and the Mutual and Balanced Force Reduction talks are also included. Our efforts to control the proliferation of nuclear weapons are discussed and the many details of arms control research are highlighted. This Report, as well as previous ACDA reports, contains a great deal of useful and informative historical material.

I am pleased to forward the Report to the Congress.

RONALD REAGAN.

THE WHITE HOUSE.

PROLOGUE

On September 26, 1961, President John F. Kennedy signed the bill creating the United States Arms Control and Disarmament Agency.

Twenty-five years later, ACDA remains the only independent government agency in the world whose sole responsibility is formulating, implementing, and supporting arms control and disarmament policies.

A Letter of Congratulations to the ACDA staff from President Reagan and a Congressional Resolution (H. Res. 551) commemorating ACDA's twenty-fifth anniversary are found in Appendix VIII of this Report.

CONTENTS

Page
Foreword III
Letter of Submittal V
Letter of Transmittal VII
Prologue IX
Executive Summary XV
Abbreviations and Acronyms XVIII

1. Perspectives 1
    Original Arms Control Expectations Not Met 2
    Current Negotiations 3
    Strategic Defenses and the Future 7
    Measures Success 9

2. Bilateral Arms Control 10
    Nuclear and Space Talks 12
    Other Strategic Issues and The Standing Consultative Commission 28
    Nuclear Testing 30

3. Multilateral Arms Control 33
    Conference on Disarmament 34
    The United Nations Disarmament Commission 38
    United Nations General Assembly 38
    Biological Weapons Convention Review Conference 40
    Mutual and Balanced Force Reductions 41
    The Conference on Security and Cooperation in Europe 43

4. Verification and Compliance 45
    Soviet Noncompliance 46
    Effective Verification 49
    Special Challenges for Verification 50
    Conclusions 55

5. Nuclear Nonproliferation 56
    Buttressing Nonproliferation Institutions 57
    International Atomic Energy Agency: Political Developments 58
    International Atomic Energy Agency: Safeguards Developments 61
    Physical Protection of Nuclear Materials 62
    Domestic Nuclear Export Control Efforts 64
    Peaceful Uses of Nuclear Energy Conference (1987) 65
    Bilateral Nonproliferation Discussions 65
    Problem Country Issues 67

6. Arms and Technology Transfers 70
    Arms Transfers by Region 72
    International Controls 77
    Technology Transfer 78

7. Research and Analysis 79
    Economics Research 79
    Operations Analysis and Computer Support 80
    The ACDA Library 81
    External Research 81
    Hubert H. Humphrey Fellowships in Arms Control and Disarmament 82
    William C. Foster Fellows 83

8. Publications 83
    Arms Control Impact Statements 84
    ACDA Annual Report 85

8. PUBLICATIONS—Continued

Page
Arms Control Compliance 85
World Military Expenditures and Arms Transfers 85
Documents on Disarmament 86
Occasional Publications 86

9. ACDA ORGANIZATION 86
Office of the Director 86
Bureau of Strategic Programs 88
Bureau of Multilateral Affairs 90
Bureau of Verification and Intelligence 91
Bureau of Nuclear and Weapons Control 92
Office of General Counsel 93
Office of Public Affairs 94
Office of Congressional Affairs 95
Office of Administration 96
Officials of ACDA as of December 31, 1986 96
ACDA Organizational Chart 97

APPENDIXES

Page

I. 1986 Arms Control Chronology 98

II. Bilateral Arms Control Related Agreements Concluded Between the United States and the Soviet Union 103

III. Status of Multilateral Arms Control Agreements 104

IV. Public Affairs Appearances by Senior ACDA Officials in 1986 112

V. Congressional Committee Hearings, Briefings, and Consultations in 1986 116

VI. General Advisory Committee 117

VII. ACDA Appropriations for Fiscal Year 1986 118

VIII. Commemoratives on the United States Arms Control and Disarmament Agency's Twenty-Fifth Anniversary 119

EXECUTIVE SUMMARY

Never before has so much arms control negotiating activity occurred in a single year as in 1986, the twenty-fifth anniversary of the United States Arms Control and Disarmament Agency. Never before have such dramatic and bold intiatives been proposed as was the case in Reykjavik, Iceland, October 11-12, when President Reagan and General Secretary Gorbachev agreed to move toward major reductions in nuclear weapons over a ten-year period. ACDA provided direct and indirect support to all of these activities in addition to carrying out its mandate to investigate all avenues leading to the reduction and control of armaments and the enhancement of US security.

In addition to the unprecedented Reykjavik meeting, the following other bilateral negotiation and discussion sessions occurred during the year:

- Three rounds of the Nuclear and Space Talks (NST) occurred in Geneva (January 16-March 14, May 8-June 26, and September 18-November 12).
- Two *ad hoc* meetings of US and Soviet arms control experts were held in Moscow August 11-12 and in Washington September 5-6. Senior NST negotiators met in Geneva December 1-5.
- Two rounds of the Standing Consultative Commission (SCC) occurred in Geneva (March 4-April 23 and October 1-November 13); a special session of the SCC was held July 22-30.
- US and Soviet nuclear testing experts met in Geneva July 25-31, September 4-17, and November 13-25.
- Four meetings of US and Soviet chemical weapons specialists were held, two in Berne (March 5-6 and September 4-5), one in Geneva (August 18-20), and one in New York (October 27-November 12).
- Two sessions of talks on Nuclear Risk Reduction Centers occurred in Geneva (May 5-6 and August 25).

- Two meetings of US and Soviet representatives concerned with the integrity of the nuclear non-proliferation regime were held in Moscow (July 28-August 1) and in Washington (December 15-18).

The increased pace of multilateral negotiations also meant that US and Soviet representatives had greater opportunities to trade concepts and concerns in the following fora during the the times indicated:

- Two sessions of the forty-nation Conference on Disarmament were held in Geneva (February 4-April 20 and June 10-August 29).
- Three rounds of the Mutual and Balanced Force Reductions (MBFR) talks occurred in Vienna (January 30-March 30, May 15-July 3, and September 25-December 4). Other MBFR discussions were held in Moscow August 5-7 and in Washington September 10-11.
- Four sessions of the Conference and Security-Building Measures and Disarmament in Europe (CDE) were held in Stockholm (January 28-March 13, April 15-May 23, June 10-July 18, and August 19-September 19). A CDE session directed to preparing for the Conference for Security and Cooperation in Europe (CSCE) meeting in Vienna was held in Stockholm August 14-15.
- The United Nations First Committee met in New York from October 13-December 19.
- The third Review Conference of the CSCE opened in Vienna on November 4.
- The Special International Atomic Energy Agency (IAEA) General Conference on Nuclear Safety was held in Vienna September 24-25.
- A successful review conference of the Biological Weapons Convention was held in Geneva September 8-26.

Concrete agreements from all this activity were minimal, however. Only the Stockholm CDE Conference yielded an initiative on confidence-building measures designed to reduce the risk of military confrontation in Europe. At the Review Conference of the Biological Weapons Convention, states parties (including the Soviet Union) agreed to exchange information on specified biological laboratories and on any unusual outbreaks of disease in order to increase transparency of relevant biological activities.

Elsewhere, IAEA members, spurred by the Chernobyl disaster, agreed in Vienna on procedures for notification and the provision of assistance following a nuclear incident with trans-boundary impacts. US support for IAEA activities continued and the number of parties to the Non-Proliferation Treaty reached 136 during the year with the addition of Malawi, Colombia, Yemen (Sana), and Trinidad and Tobago. There was also a heavy schedule of bilateral consultations and negotiations designed to ensure that international nuclear commerce does not increase the risk of nuclear proliferation.

ACDA negotiation support and arms control research during the year were directed to such objectives as the differences in the US and Soviet views on the capability of nuclear forces, the reduction of uncertainties of seismic yield estimates provided by calibration tests in Soviet test areas, and the capabilities of the Soviet economy to support military programs.

In addition to the regular annual publications (Arms Control Impact Statement report, the ACDA Annual Report, World Military Expenditures and Arms Transfers, and Documents on Disarmament) ACDA also published occasional papers on the Soviet propaganda campaign against SDI and the twenty-fifth anniversary of ACDA. ACDA also played a key role in producing the annual inter-agency Report on Soviet Noncompliance and the Adherence to and Compliance with Agreements.

Details on arms control positions for all international negotiations and aspects of ACDA's work during the year are described in this 1986 Annual Report to the Congress. The Director's own survey of where arms control has been -- and is going -- at ACDA's twenty-fifth milestone year is found in Chaper 1, PERSPECTIVES.

ABBREVIATIONS AND ACRONYMS

ABM - Anti-Ballistic Missile
ACDA - Arms Control and Disarmament Agency
ACIS - Arms Control Impact Statements
ALCM - Air-Launched Cruise Missile
ASAT - Antisatellite
BWC - Biological Weapons Convention
CBMs - Confidence-Building Measures
CD - Conference on Disarmament
CDE - Conference on Confidence and Security-Building Measures and Disarmament in Europe
CSBMs - Confidence and Security-Building Measures
CSCE - Conference on Security and Cooperation in Europe
CTB - Comprehensive Test Ban
CW - Chemical Weapons
DST - Defense and Space Talks
ENMOD - Environmental Modification Convention
GAC - General Advisory Committee
GCC - Gulf Cooperation Council
GLCM - Ground-Launched Cruise Missile
HEU - High-enriched Uranium
IAEA - International Atomic Energy Agency
ICBM - Intercontinental Ballistic Missile
INF - Intermediate-range Nuclear Forces
LRINF - Longer-range Intermediate-range Nuclear Forces
LTBT - Limited Test Ban Treaty
MBFR - Mutual and Balanced Force Reductions
NATO - North Atlantic Treaty Organization
NNA - Neutral and Non-Aligned Countries
NPT - Treaty on the Non-Proliferation of Nuclear Weapons
NTEM - Nuclear Testing Experts Meeting
NST - Nuclear and Space Talks
NTM - National Technical Means
NWFZ - Nuclear Weapons Free Zone
PNET - Peaceful Nuclear Explosion Treaty
POTAS - Program for Technical Assistance to IAEA Safeguards
PUNE - Peaceful Uses of Nuclear Energy
RECOVER - Remote Continual Verification
RERTR - Reduced Enrichment in Research and Test Reactors
RV - Re-entry Vehicle
SALT - Strategic Arms Limitation Talks
SCC - Standing Consultative Commission
SCG - Special Consultative Group
SDI - Strategic Defense Initiative
SLCM - Sea-Launched Cruise Missile
SLBM - Sea-Launched Ballistic Missile
SNEC - Subgroup on Nuclear Export Coordination
SRINF - Shorter-range Intermediate-range Nuclear Forces
START - Strategic Arms Reduction Talks
TRANSEAVER - Transport by Sea Verification
TTBT - Threshold Test Ban Treaty
UNDC - United Nations Disarmament Commission
UNGA - United Nations General Assembly

PERSPECTIVES

The Arms Control and Disarmament Agency (ACDA) celebrated its twenty-fifth Anniversary on September 26, 1986. That celebration included taking stock of what we have achieved through arms control efforts in the past quarter-century.

Viewed in the broadest perspective, US national security policy has accomplished its fundamental goal. By careful attention to the requirements of deterrence, the United States has succeeded, in cooperation with its allies, in preserving freedom and in preventing war.

Arms control negotiations over this period have produced mixed results. Nuclear nonproliferation, a field where the United States and the Soviet Union share a clear common interest, is one notable area of success. In 1963, two years after ACDA's creation, President Kennedy warned of a world by 1975 in which there would be fifteen to twenty nuclear-weapons states. We continue to face critical proliferation problems but, happily, that gloomy prediction has fallen far short of fulfillment.

The Conference on Security and Cooperation in Europe (CSCE) process has also produced successes. The Helsinki Final Act of 1975 embodied and reinforced the principle that human rights are an integral part of the concept of European security. This year, the security arm of the CSCE agreed to the Stockholm Document encompassing important confidence-building measures which will, if fully implemented, make military activities in Europe more open and predictable. This Document also records, for the first time, Soviet acceptance of on-site inspection of military forces and activities on Soviet territory.

But, on the ambitious agenda of nuclear, conventional, and chemical arms control, the results over the past twenty-five years have, by and large, been disappointing.

Original Arms Control Expectations Not Met

Our efforts in the mid-1980s are still aimed at achieving far-reaching goals that seemed within reach a decade ago. In 1972, when the ABM Treaty and the Interim Agreement on Offensive Arms (SALT I) were signed, public and Congressional confidence concerning the future of arms control was at a zenith. This confidence was based less on the modest arms limitations measures achieved, than on expectations for the future. Among the expectations, three were foremost:

- First, that arms control negotiations would lead to real reductions in nuclear weapons (an objective spelled out in the Preamble of the ABM Treaty);
- Second, that the Soviet Union would comply fully with its commitments on arms agreements;
- Third, that the conclusion of arms control agreements between the United States and the Soviet Union would better US-Soviet relations as a whole and contribute to improved Soviet behavior around the world.

1972 was also a hopeful time with regard to chemical and biological weapons control. Overcoming a long-term impasse, the United States, the Soviet Union, and other countries agreed to a complete ban on biological and toxin weapons, with chemical weapons to be negotiated subsequently.

Thus far, arms control efforts have failed to realize the above expectations. We are still pressing for a global ban on chemical weapons. Rather than reduce arms, SALT II codified further increases in nuclear arsenals. Also, contrary to expectations, the Soviets have engaged in serious violations of major agreements, including the ABM Treaty, the Biological and Toxin Weapons Convention, and SALT II.

Moreover, arms control negotiations and agreements did not lead, as expected, to overall improvement in US-Soviet relations. The period of the SALT II negotiations, from 1972 to 1979, was characterized by intense activity in arms control. But it proved to be a time, not of improving relations, but of deteriorating global stability and heightened Soviet and Soviet-sponsored aggression around the world. During these years, several countries -- South Vietnam, Cambodia, Angola, and Ethiopia -- fell to communist forces, and, in 1979, the Soviet Union invaded Afghanistan.

Current Negotiations

Strategic arms negotiations have been underway for more than a decade and a half. But not until the inception of the US Strategic Defense Initiative (SDI) and the current talks have the Soviets proved willing to talk seriously about arms control arrangements that would actually reduce offensive weapons. After the Soviet walkout from the Geneva arms talks in late 1983, it was SDI that largely rekindled Soviet interest in the arms talks and brought the Soviet Union back to the bargaining table at Geneva.

Reducing Nuclear Arms

The United States proposed deep reductions in both sides' nuclear arsenals in March 1977. The Soviet Union rejected these proposals out of hand. Eventually, the SALT II agreement was negotiated and signed in 1979. This unratified Treaty permitted significant further increases in offensive weaponry. Since 1982, President Reagan has consistently sought deep, stabilizing reductions in nuclear arms.

In the area of intermediate-range missiles, the President has proposed a "zero-zero" option, the elimination of longer-range intermediate-range ballistic missiles on a global basis. In the area of strategic forces, the President has advocated fifty percent cuts on both sides, with emphasis on the most destabilizing systems, heavy missiles with "hard-target kill" capability. In the area of defense and space, the President has proposed a managed transition over five to seven years, or ten years in combination with a plan to eliminate ballistic missiles while providing greater reliance on defensive systems. Effective defenses would strengthen deterrence and, by diminishing the military efficacy of ballistic missiles, create further incentives for even deeper reductions in these weapons.

The Soviet Union has resisted agreement to deep reductions in nuclear weapons since 1977. However, under President Reagan's persistent urging, the Soviet Union in 1986 finally began to engage more seriously in detailed discussions of deep reductions -- a change from the previous Soviet negotiating stance. Whether the Soviet Union is willing to take the steps necessary to achieve such reductions remains to be seen. They still link reductions to restrictions on US strategic defense research that would go beyond the ABM Treaty and have the effect of killing the US Strategic Defense Initiative, effectively conceding the Soviet Union a monopoly in the field of strategic defenses. Such restrictions, by eliminating the possibility of defenses, would also remove the most powerful incentive we have for continued efforts at reducing ballistic missiles -- the promise of defensive systems to render such missiles less militarily effective.

Compliance

The United States has scrupulously complied with its arms control obligations and continues its concerted effort to get the Soviet Union to fully comply with its arms control obligations. US policy has also aimed at encouraging real mutual restraint in the arms competition while negotiations proceed.

This effort has proved unsuccessful. The pattern of Soviet noncompliance with existing arms agreements remains serious and persistent. Major agreements have been affected. In a major violation of the ABM Treaty, the Soviets have deployed a large phased-array radar in an unpermitted location at Krasnoyarsk. In violation of its political commitment to abide by SALT II, the Soviet Union has tested and deployed a prohibited second new type of ballistic missile (the SS-25), encrypted telemetry in a manner that violates the verification provisions, and exceeded the overall limit on Strategic Nuclear Delivery Vehicles (SNDV).

In the face of continued Soviet violation of SALT I and of the unratified and expired SALT II agreement, President Reagan has stated that the United States can no longer be bound unilaterally by SALT. However, the President has pledged that the United States, as it modernizes, will continue to exercise utmost restraint and not deploy more strategic nuclear delivery vehicles or strategic ballistic missile warheads than the Soviet Union. Soviet willingness to come to terms constructively with the problem of noncompliance is indispensable to the future of arms control.

Reykjavik

The most notable event in arms control negotiations during 1986 was the meeting between President Reagan and General Secretary Gorbachev in Reykjavik, Iceland, on October 10-12, 1986. President Reagan agreed to General Secretary Gorbachev's request for this special meeting in an effort to see if differences between the United States and the Soviet Union on arms control might be narrowed through discussions at the highest level.

In two days of intense negotiations, involving not only the leaders but also high-level delegations from both nations, extraordinary progress was made, with significant movement in START, INF, nuclear testing, and greater clarification of each side's position on strategic defense. In the end, however, the Soviet Union held all progress hostage to a demand to restrict strategic defense research to laboratories, a restriction that would go well beyond the ABM Treaty and effectively kill the US Strategic Defense Initiative (SDI). Such a move would end our hope of shifting the strategic balance increasingly toward defensive weapons on both sides and remove a major incentive for continued progress in arms control. The Soviets know that kind of a demand is not realistic.

In the subsequent negotiations at Geneva, the United States tabled all of the proposals it had put forward in Reykjavik, including the proposals to which the Soviet Union had agreed in principle before linking progress in all areas to its demand concerning strategic defenses. The areas of agreement in principle at the Reykjavik meeting included the following:

- START. Agreement on fifty percent reductions in offensive weapons, including limits of 1,600 SNDVs and 6,000 total warheads on both sides. Important advances in counting rules and Soviet recognition of the requirement for "significant cuts" in heavy ICBMs.
- INF. 100 global warhead limit on longer-range INF missiles, with zero in Europe; limitations on shorter-range INF (SRINF), followed by negotiations on SRINF reductions to begin once the initial INF agreement is concluded.
- Nuclear Testing. Plan proposed by President Reagan for US ratification of the Threshold Test Ban Treaty (TTBT) and Peaceful Nuclear Explosion Treaty (PNET); with negotiations on further testing limitations to follow resolution of verification problems and ratification.
- ABM/SDI. Both sides moved closer on the maximum time they would confine themselves to research, development, and testing (which are permitted by the ABM Treaty). The United States moved from seven and one-half years to ten, or through 1996, contingent upon strict compliance, coupled with a plan for fifty percent reduction in strategic forces over five years, and followed by complete elimination of ballistic missiles of whatever range or armament by the end of ten years. The Soviets moved from fifteen years to ten, but retained unacceptable linkages seeking to gut SDI. Furthermore, they would not agree on the sides' right to deploy advanced strategic defenses.

Differences Remain

Despite the progress at Reykjavik, significant substantive differences remain between the two sides in all areas of negotiations, not simply strategic defense.

In START, disagreements remain on such significant issues as sublimits on various categories of systems and provisions for verification. Both issues bear critically on the question of whether an agreement will add to or detract from US national security.

In INF, outstanding issues again remain on verification, which is especially difficult where mobile systems are concerned. Moreover, the Soviet Union has not yet accepted the US proposal for East-West parity on the shorter-range INF systems. Agreement on this issue is key, since in many cases shorter-range INF missiles can perform missions for which longer-range INF missiles were designed.

In nuclear testing, agreement has not yet been reached on measures for verifying the unratified TTBT and PNET and on how to characterize nuclear testing talks.

The United States continues to pursue negotiations vigorously, seeking ways of narrowing differences and meeting Soviet concerns in a manner consistent with the demands of our own national security. We continue to hope that the Soviet Union will be willing to build on the progress made at Reykjavik, and will join with us in moving towards a world in which deterrence rests increasingly on defensive systems, rather than the threat of offensive nuclear retaliation.

Strategic Defenses and the Future

Until now, however, the Soviet approach to the SDI has been aimed strictly at securing unilateral advantages for the USSR. While vigorously pursuing its extensive ABM activities and a vast and unacknowledged strategic defense program of its own, the Soviet Union has pressed for new treaty arrangements that would have the effect of seriously inhibiting or killing the US SDI. Such an agreement would seal a Soviet monopoly in strategic defenses. Historically, the Soviet Union has demonstrated an intense interest in defensive systems, and currently the Soviet Union is devoting enormous resources (roughly equal to what it spends on strategic offense) to a host of defensive programs, including research on advanced strategic defenses.

The United States has argued for arrangements that would capitalize on both sides' interest in defenses. The goal is to permit both nations to move toward a more stable strategic environment, based on greater reliance on defensive systems and reduced emphasis on offensive ballistic missiles.

Defenses hold out great hope for increasing stability. The ability to intercept and destroy attacking ballistic nuclear missiles and their warheads would significantly complicate the calculations of an aggressor planning a first strike. In enhancing crisis stability in this manner, defensive systems could achieve a key goal that we have sought to accomplish by means of negotiated arms agreements. Moreover, by reducing the efficacy of ballistic missiles, defenses would create concrete incentives for reducing these systems, which are potentially the most destabilizing. Finally, at reduced levels of ballistic missiles, strategic defenses can provide critical insurance against cheating and treaty breakout.

At Reykjavik, President Reagan made an historic offer to General Secretary Gorbachev to combine continued research, development, and testing of strategic defenses, which are permitted by the ABM Treaty, with a plan to eliminate ballistic missiles over the next ten years. After that time, either side would be free to deploy strategic defenses unless the sides agree otherwise. Through this offer, President Reagan sought to meet stated Soviet objections that strategic defenses could be used by the United States to gain a first-strike capability against the USSR. This has never been the US intention.

The world envisioned in President Reagan's proposals would realize some of the most ambitious goals enunciated for arms control twenty-five years ago. It would be a world in which ballistic missiles are greatly reduced and eventually eliminated, in which security relies more heavily on defenses, in which deterrence rests primarily on slower, more stabilizing, second-strike systems, and, finally, in which compliance with arms control is underwritten by American defenses, not Soviet promises.

Measuring Success

After twenty-five years, the traditional approach to arms control is running up against long-inherent limitations. Paramount among these is the requirement for effective verification. The increasing movement on both sides towards smaller, more mobile weapons systems is at the same time posing new and extremely difficult problems for traditional verification. We have passed the time when verification of meaningful arms control agreements required only the traditional "national technical means." Today, more intrusive forms of on-site inspection and cooperative measures will be necessary.

What we can achieve through arms agreements also will always be defined by Soviet willingness to cooperate with us in devising provisions that are equitable, in accepting effective verification, and in complying fully with agreements signed. But that implies greater cooperation than we have succeeded in achieving with the Soviet Union during the past forty years.

The search for agreements, however, is only one part of the broad work of arms control, which, properly considered, includes the whole range of efforts engaged in to preserve freedom and strengthen peace. With or without new agreements, we must be able to guarantee our own safety by the strength of our deterrent forces, by the vibrancy and unity of our alliances, and by our own confidence and resolve as a nation.

Arms control thus remains just one part of a broad US policy designed to advance the cause of freedom and preserve the peace. At the base of this policy are two convictions: first, that weapons are the symptoms rather than the cause of conflict in the world; and second, that the key to maintaining global stability lies in maintaining US and allied strength.

It is strength that deters war and enables the United States to bargain in arms control negotiations with the Soviet Union.

The Administration has continued to pursue a broad agenda with the Soviet Union. We have focused not just on arms control, but also on the needs to improve human rights and to settle regional conflicts without outside interference. These are the foundation stones of genuine global stability. Success in arms control ultimately must be measured not by signatures on parchment but by the endurance of peace and freedom.

BILATERAL ARMS CONTROL.

The sphere of US-USSR bilateral arms control in 1986 was characterized by a new impetus to the Nuclear and Space Talks (NST) provided by the agreements reached at the conclusion of the November 1985 summit between President Reagan and General Secretary Gorbachev. Although Soviet positions and reactions to new US proposals following the summit were disappointing, momentum was maintained by three rounds of NST. This momentum was further accelerated by arms control experts meetings in Moscow in August and in Washington in September, and the Reykjavik meeting of October, 1986.

Significant progress was achieved in Reykjavik in narrowing the differences between the sides, particularly in the areas of Strategic Arms Reduction Talks (START) and Intermediate-range Nuclear Forces (INF), and substantively clarifying and developing both sides' positions on defense and space issues. Following the Reykjavik meeting and the end of Round VI of NST, US and Soviet chief NST negotiators and their deputies met December 2-5. During four days of informal, but intensive discussions, the negotiators reviewed the full range of issues in preparation for Round VII of NST negotiations to begin January 15, 1987.

The most notable US arms control steps during 1986 included two Presidential initiatives. In July, the President sent a letter to General Secretary Gorbachev proposing that if the sides could agree on radical reductions in strategic offensive arms, then the United States was prepared to confine itself to a program of research, development, and testing of strategic defenses, which are permitted by the Anti-Ballistic Missile (ABM) Treaty, for a period of five years, through 1991. After that time, if either side wished to deploy defenses, it would submit a plan for sharing the benefits of strategic defenses and the elimination of ballistic missiles; that plan would be negotiated for a period of not more than two years. If, at the end of two years, the sides could not agree on such a plan, either side would be free thereafter to deploy strategic defenses upon six-months' notice.

In a second initiative to try to reach agreement, the President offered at his Reykjavik meeting with Mr. Gorbachev a modified proposal responsive to the expressed Soviet concerns about the Strategic Defense Intiative (SDI). President Reagan proposed a ten-year commitment not to deploy advanced strategic defenses, coupled with the concurrent reduction of strategic offensive arms by fifty percent within five years, and the total elimination by 1996 of all US and Soviet offensive ballistic missiles, with either side free to deploy strategic defenses after that time unless otherwise agreed.

Despite these historic US proposals, no final agreements were concluded at Reykjavik. Despite Soviet attempts to misrepresent the outcome of the Reykjavik meeting, President Reagan believes that the real progress achieved in 1986 should not be erased and that differences concerning strategic defenses should not limit progress toward achieving significant agreements in START and INF.

Other bilateral arms control activities in 1986 included two regular sessions and one special session of the Joint US-

Soviet Standing Consultative Commission (SCC) in Geneva. The United States agreed to a Soviet request for a special session of the SCC, which was held from July 22-30, 1986. The purpose of the session was to respond to Soviet questions and concerns about President Reagan's May 27, 1986, decision on the SALT agreements and on the US interim restraint policy as well as for the United States to hear Soviet responses to US concerns about Soviet noncompliance with the SALT agreements. The United States also used the opportunity to renew President Reagan's request for the Soviet Union to join the United States in establishing an interim framework of truly mutual restraint, a condition which the United States views as essential to maintain mutual confidence in the bilateral arms control process as we seek to negotiate arms control agreements.

Nuclear and Space Talks

Three rounds of NST were held during the year: Round IV from January 16 to March 4; Round V from May 8 to June 26; and Round VI from September 18 to November 12. The format for the talks agreed upon in Round I has remained that of one delegation from each side divided into three separate negotiating groups, each of which meets once a week. Joint plenary meetings involving all three groups continue to meet, generally once at the beginning, at mid-round, and once again at the end of each round. Ambassador Max Kampelman continued to serve in 1986 as Head of the NST Delegation as well as head of the negotiating group for the Defense and Space Talks (DST). Ambassador Maynard Glitman continued to head the INF negotiating group. Ambassador John Tower resigned after Round IV as head of the negotiating group on START. He was replaced by his deputy, Ambassador Ronald Lehman, who served during Rounds V and VI. The Soviet negotiators during 1986 were Ambassador V. P. Karpov for the NST Delegation and the DST negotiating group, L. A. Masterkov for the INF negotiating group, and A. A. Obukhov for the START negotiating group.

The NST negotiations in 1986 remained businesslike but took a number of turns, some of which impeded progress and others which moved the talks forward. For example, on January 15, 1986, the day before Round IV began, General Secretary Gorbachev announced in public a proposal for a three-stage program to ban nuclear weapons by the year 2000. Although the first phase of the proposal appeared to contain some constructive elements on INF, the overall impact of this new Soviet action during Round IV was to impede progress, to fail to act on the commitments the Soviet Union undertook at the November 1985 summit meeting between President Reagan and General Secretary Gorbachev, and to provide an inadequate response to the US proposals tabled at the summit.

Nevertheless, the United States welcomed Soviet agreement in principle with the ultimate goal of the total elimination of nuclear weapons, as well as the critical importance of verification to any future agreement. The United States also responded to the specific Soviet moves in INF by proposing during Round IV a concrete and phased plan for global elimination of US and Soviet Longer-range Intermediate-range Nuclear Forces (LRINF) missiles by the end of the decade, and by tabling a set of concrete verification measures. The United States also indicated that the eventual total elimination of nuclear arms would require the correction of conventional and other force imbalances, full compliance with treaty obligations and peaceful resolution of regional conflicts in ways that allow free choice without outside interference. The President noted that the details of the Soviet "plan" did not address these vital requirements and he stated that he would like to make progress on all these fronts.

After the disappointing progress of Round IV, the talks took a more positive turn in Round V when the Soviets tabled new modified proposals which appeared to signal the beginning of a serious Soviet effort to seek real progress. Specifically, the Soviets introduced a new option calling for more realistic strategic arms reductions while dropping earlier demands to include nonstrategic US systems.

The US negotiating team continued during Round V to explain and elaborate on its concrete proposals in all three negotiations. Those proposals included: in START, a formula for equitable and verifiable reductions of fifty percent in offensive nuclear forces; in INF, the global elimination, through phases, of an entire class of US and Soviet land-based INF missiles; and in DST, an offer to engage in a dialogue on managing the transition to a more stable basis for deterrence through increased reliance on defensive systems and an "open laboratories" initiative to assure both sides of the defensive nature of the other side's strategic defense research. Finally, the United States stated clearly that it could not accept the new Soviet proposals, and we reiterated our position that progress in one area should not be held hostage to progress in other areas, as the Soviets continued to insist.

Between Rounds V and VI, US and Soviet arms control experts met on August 11-12 in Moscow and again on September 5-6 in Washington. The purpose of the meetings was to support the Geneva NST negotiations and the scheduled meeting between Secretary of State Shultz and Foreign Minister Shevardnadze on September 19-20. The meetings were serious and substantive and yielded some progress, although not as much as the US side would have wished. The meetings also served the wider US-Soviet diplomatic process in arms control and the other key areas of the US-Soviet agenda, including human rights, bilateral issues, and regional issues.

The United States returned to Geneva for Round VI prepared to consider stabilizing, equitable and verifiable nuclear arms reductions of less than fifty percent if the Soviets preferred such an approach. After the round began, President Reagan and General Secretary Gorbachev travelled to Reykjavik, Iceland, to hold their historic 1986 meeting. The President went to Iceland to promote the main objectives of American policy toward the Soviet Union: human rights, resolution of regional conflicts, improved American-Soviet Union relations, and real arms reductions.

During ten hours of intense and dramatic negotiations, the United States and the Soviet Union reduced differences in virtually every aspect of nuclear arms control, i.e., strategic arms reductions, intermediate-range nuclear forces, verification, and nuclear testing; the two sides also came to a better understanding of the differences on strategic defense. The sides came close to an agreement that would have resulted in massive reductions in offensive ballistic missiles.

Unfortunately, Mr. Gorbachev held hostage final agreement in all areas, including START and INF, to his nonnegotiable demands concerning SDI, in spite of prior agreement at the November 1985 Summit to talk without pre-conditions and in spite of Soviet indications as early as October 1985, that a separate INF agreement was possible. The President insisted that SDI remain viable under the terms of the 1972 ABM Treaty. In an effort to break the deadlock, the President offered a ten-year commitment not to withdraw from the ABM Treaty for the purpose of deploying any future strategic defense system, a fifty percent reduction in US and Soviet strategic forces in the next five years and total elimination of all US and Soviet ballistic missiles over the subsequent five years, that is, by the end of 1996. At the end of that period, either side would have the right to deploy strategic defenses unless the two sides agreed otherwise. Mr. Gorbachev rejected the President's offer, refusing to allow SDI testing outside the laboratory and insisting on other restrictions going well beyond the ABM Treaty.

Notwithstanding the disagreement on SDI, the President called upon the Soviet leadership to follow through on arms reduction accomplishments at Reykjavik and to continue to discuss differences on strategic defense at the negotiating table in Geneva. The President moved quickly to table the proposals discussed at Reykjavik in the NST. Although the Soviets were slow to respond, Round VI ended with the hope that future discussions in Geneva and in other meetings could build on the Reykjavik progress toward arms reduction.

With that objective in mind, chief US and Soviet NST negotiators and their deputies met in Geneva during the first week of December for fours days of informal ad referendum talks. Although there were no substantive changes in positions which narrowed differences, some progress was achieved in reaffirming significant points of agreements and clarifying points of disagreement. The talks hopefully provided the basis for a successful seventh round of NST, scheduled to begin on January 15, 1987.

Strategic Arms Reduction Talks

Round IV in January 1986 offered an important opportunity to translate the general agreement on the principle of fifty percent reductions in strategic offensive arms reached at the Geneva Summit into real progress at the negotiations. Moreover, the new US START proposal tabled in Round III on November 1, 1985, built on previous US proposals and on some of the positive aspects of the Soviet October 1985 counterproposal, in particular the concept of fifty percent reductions. That US proposal provided for reductions to 6,000 warheads on each side and included ceilings of 4,500 on ballistic missile reentry vehicles, 3,000 on ICBM reentry vehicles, and 350 heavy bombers. It also contained a number of qualitative constraints including a fifty percent reduction in Soviet throw-weight, a ban on heavy strategic ballistic missile modernization and, a ban on mobile ICBMs.

President Reagan therefore instructed US negotiators at the beginning of Round IV to to make it clear that the US November proposal was not a take it or leave it proposition. During the round, the United States pressed ahead in laying out the details of the US position, and sought to expand common ground, in particular the agreement in the November Joint Statement to reduce strategic offensive arms by fifty percent, appropriately applied.

Contrary to the mandate in the Joint Statement of November 1985, the USSR took the unexpected step at the opening of Round IV of proposing a three-stage approach leading to the elimination of all nuclear weapons by the year 2000. This new proposal, which had been presented in public the day before, contained a number of elements which were the same or similar to earlier Soviet positions and raised questions about whether the Soviets were indeed prepared to move forward on areas of common ground as agreed to in the November 1985 Joint Statement. The Soviet proposal of January 1986 was essentially unchanged from the Soviet START position of October 1985 and retained its inequities. Specifically, the Soviet definition of systems to which fifty percent reductions would be applied (i.e., those capable of reaching the territory of the other side) included US intermediate-range missiles, tactical aircraft, and carrier-based aircraft, while excluding some 2,000 comparable Soviet systems. The proposal also directly limited all "nuclear charges," thus equating gravity bombs and short range attack missiles (SRAMs) on US bombers (which must face unconstrained Soviet air defenses) with ballistic missile reentry vehicles (against which defenses are strictly limited).

In assessing the new Soviet "program," a primary criterion was whether it would have advanced the negotiations toward an agreement on substantial reductions that are equitable and effectively verifiable. As the round progressed, the United States made a detailed analysis of the new Soviet ideas and consulted closely with its friends and allies in Europe and Asia prior to responding to the Soviet Union. On February 24, President Reagan responded to General Secretary Gorbachev by stating that the United States supports a process by which the United States and the Soviet Union would take the first steps by implementing the principle of fifty percent reductions in the nuclear offensive forces of both sides, appropriately applied, and by negotiating an INF agreement. The United States urged the Soviet Union to focus on the prompt accomplishment of those necessary first steps by responding to the concrete and comprehensive US proposals placed on the table in Geneva on November 1, 1985.

Round IV of START ended with little progress. Mr. Gorbachev had made no change in the Soviet position regarding START. The Soviet negotiators at Geneva neither responded adequately to the possibilities raised by the US November 1985 initiative nor introduced any new ideas of their own. Rather than engaging in specific discussions of issues directed toward narrowing remaining qualitative and numerical differences in the sides' positions, the Soviet side engaged heavily in public rhetoric, and restricted discussion to abstractions and generalities. The Soviets turned aside the US negotiators' efforts to expand areas of commonality. The primary missing element in the Soviet negotiating formula for START at the end of Round IV was a willingness to take into account Western concerns.

President Reagan reiterated the key US objectives in the negotiation in a statement released on May 7, the day before Round V began. Those objectives were deep cuts, no first-strike advantage, continuing defensive research and full compliance. He also stated that the US START proposals adopt the concept of fifty percent reductions, seek to enhance stability by reducing the capability to conduct a first strike, take into account concerns expressed by the Soviet Union, and build on areas of common ground. Finally, US negotiators were given instructions that provided them with the flexibility needed to explore all promising approaches for agreement.

During Round V, Soviet negotiators tabled new proposals including a new option calling for lesser strategic arms reductions but dropping demands to include US nonstrategic systems. It appeared that these proposals signalled the beginning of a serious Soviet effort to join the United States in really reducing offensive nuclear arms. The President stated that they would be studied very carefully to see how they might help the sides move toward the goal of deep, equitable, and verifiable reductions.

The US START team returned to Round VI in September, prepared to work on the elements of an agreement codifying fifty-percent reductions -- the preferred US approach -- or, alternatively, to work toward an agreement providing for lesser strategic arms reductions, as the Soviets had proposed in June. This approach was overtaken by the results of the discussions between President Reagan and General Secretary Gorbachev in Reykjavik, which confirmed the principle of fifty percent reductions. While fundamental differences between the sides over research on strategic defenses remained, significant progress was achieved in overcoming longstanding disagreements on a number of important START issues. Building on the concept of fifty percent reductions, the sides agreed to reduce and limit their strategic nuclear delivery vehicles (namely, intercontinental ballistic missiles, submarine-launched ballistic missiles and heavy bombers) to 1,600 and the nuclear warheads carried on them to 6,000. Furthermore, the sides agreed on rules for counting the various types of strategic nuclear warheads within the aggregated 6,000 ceiling, in particular for counting the weapons carried by heavy bombers (air-launched cruise missiles, bombs and SRAMS). The Soviets also proposed undefined "significant cuts" in their force of heavy intercontinental ballistic missiles (ICBMs), SS-18s.

Seeking to elaborate on the results of Reykjavik in the START area, the United States subsequently tabled proposals in Geneva that incorporated the areas of agreement achieved in Iceland and proposed ideas for overcoming outstanding differences, especially on the issue of appropriate sublimits. Later in the round, the Soviet Union tabled its START proposal which confirmed certain understandings reached at Reykjavik, but, at the same time, backtracked on other elements. The Geneva meetings of NST ambassadors in December did not appreciably advance these START discussions, although the US had come fully prepared to clarify areas of agreement and disagreement, thus establishing a basis for constructive negotiation in Round VII.

Defense and Space Issues

While significant reductions in offensive nuclear systems were the highest US priority in the Geneva talks from the beginning, the United States was prepared to negotiate on defense and space issues as well. In the first three rounds of NST, the US negotiating group explained positions on these issues. US negotiators pointed out that the continuing build-up of Soviet offensive nuclear arms, the intensive Soviet strategic defense program, and Soviet arms control violations, all had called into question the basic offense/defense relation for strategic arms as it was understood by the United States in the 1970s. US negotiators in the DST group stressed the importance attached to reversing the erosion of the ABM Treaty regime. They devoted considerable attention to specific areas of Soviet noncompliance with the terms of the ABM Treaty. Conversely, the United States stressed that US research into strategic defense has remained fully consistent with the ABM Treaty and also with the obligations of the Outer Space and Limited Test Ban Treaties.

The United States hoped to discuss at the DST how, if research proves that effective defenses against ballistic missiles are feasible, the sides could manage jointly a stable transition to a deterrence regime which would increasingly rely on defensive systems. To build confidence in that process, the United States offered an open laboratories initiative in which the sides would regularly brief each other and would arrange visits to laboratories and associated facilities where strategic defense research is being conducted.

The core of the Soviet position was to call for a moratorium, and subsequently a ban, on the development (including scientific research), testing, and deployment of what they term "space-strike arms." They defined "space-strike arms" very broadly as any space-based system intended to strike space objects or targets on the earth and any system targeted against satellites. Finally, the Soviets asserted that progress on reductions of offensive arms had to be linked to an agreement to ban "space-strike arms."

During Round IV, January-February, despite US efforts, there was no movement toward common ground; Soviet proposals did not in any way alter the Soviets' insistence on curbing the SDI.

During Round V, the Soviets, without relaxing their opposition to SDI, made some significant revisions to their proposal to ban development (including scientific research), testing and deployment of "space strike weapons," which they had made a necessary condition for fifty percent reductions in strategic forces. Their new proposal, as outlined by General Secretary Gorbachev in a speech in Budapest in June provided for agreement on nonwithdrawal from the ABM Treaty for at least fifteen years and for limiting work on space-based elements of strategic defenses to "the level of laboratory research." They also proposed a series of new definitions which would have the effect of amending the ABM Treaty in ways that would essentially kill SDI. With such an agreement, he said that strategic offensive arms could be reduced to equal ceilings and, in this case, the question of medium-range weapons could be solved separately.

After the conclusion of Round V, the President in an effort to bridge the gap between the sides made new proposals which he described in his September 1986 speech to the United Nations General Assembly. He said that the United States continues to respect the Anti-Ballistic Missile Treaty, inspite of clear evidence the Soviets are violating it. He said that we have told the Soviets that if we can both agree on radical reductions in strategic offensive weapons, we are prepared to sign an agreement on research, development, testing, and deployment of strategic defenses based on the following:

- First, both sides would agree to confine themselves, through 1991, to research, development, and testing (which are permitted by the ABM Treaty) to determine whether advanced systems of strategic defense are technically feasible.
- Second, a new treaty, signed now, would provide that if, after 1991, either side should decide to deploy a system, that side would be obliged to offer a plan for sharing the benefits of strategic defense and for eliminating offensive ballistic missiles. This plan would be negotiated over a two year period.
- Third, if the two sides cannot agree after two years of negotiation, either side would be free to deploy an advanced strategic defensive system upon six months notice.

During Round VI the US side presented to the Soviets details of the President's proposal. The Soviet side at the beginning of the round remained inflexible on its earlier position. In the middle of the round the President and General Secretary Gorbachev met for two days (October 11 and 12) at Reykjavik, Iceland.

The Soviets modified their position at Reykjavik with respect to Defense and Space issues to require the sides to agree not to withdraw from the ABM Treaty for ten years. They would have had us agree to ban all research, development, and testing of space elements of strategic defense systems except for research and testing done in the laboratory. This Soviet proposal would be far more restrictive than the ABM Treaty. On its face, the proposal would ban tests of devices other than ABM systems and components, even though ABM systems and components are the only items regulated by the Treaty. In essence, the Soviet proposal would kill the SDI program and, therefore, President Reagan could not accept it.

The SDI program, as documented in the Administration's Report to The Congress on The Strategic Defense Initiative, March 1986, consists of a large number of near-term technology research projects and sixteen major experiments. Thus, the most obvious effect of the Soviet Reykjavik proposal would be to prohibit a number of planned major technology demonstration experiments, especially those involving space-based concepts that are to take place outside of laboratories, even though they are designed to be fully compliant with the ABM Treaty.

To break the deadlock, the President offered a ten-year commitment through 1996 not to deploy any future strategic defense systems, coupled with fifty percent reductions in US and Soviet strategic forces in the next five years, and mutual and total elimination of all US and Soviet offensive ballistic missiles over the following five years. Thus, by the end of 1996, all offensive ballistic missiles of whatever range or armament would be eliminated. After that time, either side would be free to deploy strategic defenses unless the sides agree otherwise. The Soviets, however, insisted that SDI research be confined to the laboratory for the ten years, followed by a period of negotiations. Notwithstanding these disagreements on strategic defenses, the President has called on the Soviet leadership to follow through on arms reduction accomplishments at Reyjkavik and continue to discuss differences on strategic defenses which have now been narrowed.

Intermediate-range Nuclear Forces

At the outset of the fourth round of negotiations in the INF group, the first round of 1986, the United States sought to follow up on the agreement between President Reagan and General Secretary Gorbachev at their November 1985 summit meeting that the sides should focus work on an interim INF agreement. To this end, the United States presented in greater detail the new interim proposal that it had first outlined in 1985 at the end of the third negotiating round. This proposal called for agreed US and Soviet reductions to levels of 140 LRINF missile launchers in Europe, with proportionate reductions of Soviet SS-20s in Asia leading to equal global ceilings on LRINF missile warheads.

The Soviet position in the opening round of 1986, however, shifted away from discussion of interim INF agreements to the elements of General Secretary Gorbachev's proposed outline of January 15 for a comprehensive disarmament approach.

The United States studied carefully the Soviet's January proposal and probed Soviet negotiators on the details behind this proposal. Allied governments were also consulted in preparing an appropriate response.

Some elements in Gorbachev's proposal on INF seemed to be constructive. The Soviets appeared to have dropped their demand that British and French nuclear forces be counted equally and along with US LRINF forces. The Soviets expressed willingness to accept an outcome involving reductions of all US and Soviet LRINF missiles in Europe, including the SS-20s to zero. The potentially positive impact of this proposal was negated, however, by a number of unacceptable conditions and omissions related to the offer. Among the conditions were:

- A nontransfer provision calling on the United States to assume an obligation not to transfer strategic and medium-range missiles to third countries. This, of course, is aimed directly at long-standing programs of cooperation the United States has with its allies and would signal the end of the UK Trident modernization program.
- A demand that the United Kingdom and France not "build up" their "corresponding nuclear arms" and declare their intent to begin to eliminate those forces in Stage 2. The Soviets know that a ban on strategic modernization would sooner, rather than later, spell the demise of British and French SLBM forces.

Among the omissions were:

- The absence of a provision for reductions in SS-20s in the Asian portion of the USSR until a subsequent agreement and until after US LRINF missiles in Europe were reduced to zero.
- The absence of a provision limiting Shorter-range Intermediate-range Nuclear Forces (SRINF) missiles. If LRINF missiles were reduced to zero, the effect could be circumvented by SRINF deployments, which can cover most of the important targets in NATO Europe when forward deployed in Eastern Europe.

The consequence of accepting the Soviet proposal would have been the elimination of US LRINF missiles from Europe and the probable deterioration of UK and French nuclear deterrents, but without elimination of the SS-20 threat which our friends and allies in both Europe and Asia face.

Study of the overall effect of the Gorbachev proposal in detail caused the United States to conclude, based on both the manner of presentation and the substance, that it had been designed primarily for its political and propaganda impact. However, in order to accelerate efforts to find common ground between the positions of the two sides, the President authorized, in late February, the tabling of a new US INF proposal, which sought once again to achieve the goal the United States believes to be the best solution in INF: the global elimination of the entire class of US and Soviet LRINF missiles.

The new US proposal incorporated a detailed, phased approach for reaching its objective, which would achieve balance at the earliest possible time while maintaining stability throughout the reduction process:

- By the end of 1987, the United States and the Soviet Union would reduce their LRINF missile deployments in Europe to 140 launchers each, with the Soviet Union making concurrent proportionate reductions in Asia.
- Within the following year, both sides would further reduce the numbers of LRINF missile launchers remaining in Europe and Asia by an additional fifty percent. Finally, both sides would move to the total elimination of this category of weapons by the end of 1989.
- Associated with this plan, there would be a parallel series of global LRINF missile warhead ceilings under which the United States would retain the right to global warhead equality. As Soviet SS-20 launchers were reduced, the launchers and their associated missiles and agreed support equipment would be destroyed. US systems in excess of the launcher limits cited above could be withdrawn to the continental United States unless or until they were also in excess of the equal global warhead ceiling associated with the launcher reductions then being implemented, in which case they would be destroyed.
- These reductions and limits would involve United States and Soviet systems only. The United States would agree to no constraints, in these bilateral negotiations, on the forces of the United Kingdom or France.
- These reductions would also be accompanied by constraints on SRINF, either establishing an equal ceiling at current Soviet levels or at the levels both sides had on January 1, 1982. This ceiling would enter into effect by the end of 1987.

The United States also continued to stress the critical importance of agreeing to effective means of verification so as to be able to assess with confidence compliance with provisions of any arms control agreement. Towards the end of the round, the United States presented an outline of a comprehensive verification regime for LRINF, which included the use of national technical means of verification and cooperative measures between the two governments, such as on-site inspection and data exchanges.

In the second negotiating round of 1986, the fifth since NST began in 1985, US and Soviet positions in Geneva did not shift substantially. The United States provided more details on its new proposal of February as well as on specifics of its proposed verification regime. The Soviets, for their part, resisted any significant move on the main issues in dispute, such as Soviet Asian reductions of SS-20s and constraints on SRINF missiles, and were unwilling to discuss the substance of verification issues.

However, the series of high-level exchanges described above was also addressing INF issues. In particular, President Reagan's letter of July 25 to General Secretary Gorbachev again made clear the US preference for the total elimination of US and Soviet LRINF missiles on a worldwide basis but proposed, if this was not possible, a return to the November 1985 Summit's focus on an interim agreement that could allow LRINF reductions to begin as soon as possible. This led to a series of high level discussions on INF, and on other arms control issues, in August and September.

In these discussions, the Soviets offered reductions in US and Soviet LRINF missile warheads to a level of 100 warheads in Europe, with a freeze on US and Soviet systems outside of Europe; they did not raise past Soviet demands for limits on British and French systems or their modernization. The United States made clear, in return, that it could accept the limit of 100 US and Soviet LRINF missile warheads in Europe, if such warheads outside Europe were lowered to 100 or less and if SRINF systems were also limited.

The sixth INF round, the third of 1986, began in mid-September. Our initial approach to INF in the round reflected the high-level exchanges over the summer. As the US INF negotiators made clear, we could accept an interim agreement providing for 100 warheads on each side in Europe if the Soviets were permitted no more than 100 warheads in Asia (with a like restriction on US deployments outside of Europe.) However, no clear movement by the Soviets was made in Geneva prior to the Reykjavik meeting on any of the main issues separating the sides: reductions in Asia, constraints on SRINF missiles, and verification issues.

At Reykjavik, the sides agreed to allow only equal global ceilings of 100 LRINF missile warheads on each side, none of which could be deployed in Europe. The Soviets thus agreed to reduce their total SS-20 force to a level of 100 warheads and to remove all SS-20s from Europe; they also offered to freeze their SRINF missile systems pending negotiation of reductions (but would require US SRINF to be "frozen" at the current level of zero) and agreed in principle to some key verification elements. However, as in START, the Soviets sought to hold this agreement hostage to US acceptance of their position on SDI.

Following Reykjavik, the United States formally tabled in Geneva the INF position on which conditional agreement had been reached. The Soviet negotiators in response did not go beyond Soviet public statements that Soviet positions at Reykjavik remained on the table, but that an INF agreement was dependent on resolution of SDI issues.

Following the meetings in Vienna on November 5-6 between Secretary of State Shultz and Foreign Minister Shevardnadze, in which no progress on NST issues was made, the Soviet Delegation in Geneva tabled proposals reflecting the Soviet position at Reykjavik, continuing to hold agreement on INF hostage to resolution of space and defense issues. The way in which the Soviets formulated their new proposals also raised some new ambiguities in areas where we thought the Soviet position was clear. In general, these ambiguities were not resolved at the NST ambassadors' meetings in December.

Other Strategic Issues and the Standing Consultative Commission

Interim Restraint

A comprehensive review of our interim restraint policy and the required response to the continuing pattern of Soviet noncompliance with arms control agreements was completed in

May 1986. Based on this review, and following consultations with the Congress and key allies, the President concluded that the Soviet Union had not taken those actions that would indicate a readiness to join in an interim framework of truly mutual restraint.

Given the lack of Soviet reciprocity, President Reagan decided that in the future the United States must base decisions regarding its strategic force structure on the nature and magnitude of the threat posed by Soviet strategic forces and not on standards contained in the unratified Strategic Arms Limitation Talks II (SALT II) Treaty of 1979 or the SALT I Interim Agreement of 1972. SALT II would have expired December 31, 1985, by its terms even if it had been ratified. The SALT I Interim Agreement of 1972 had also expired.

After reviewing the programmatic options available, the United States remained in technical observance of SALT II until November 28, 1986, when the 131st Air Launched Cruise Missile (ALCM)-carrying B-52 bomber was deployed.

The Soviet Union was called upon to join the United States in establishing an interim framework of truly mutual restraint on strategic offensive arms and to pursue with a renewed vigor the negotiations in Geneva. At a special session of the SCC in the summer, specifically requested by the Soviets to address this issue, the Soviet Union rejected our call for establishment of such an interim framework of truly mutual restraint pending conclusion of a verifiable agreement on deep and equitable reductions in offensive nuclear arms.

Standing Consultative Commission

The SCC is the forum established in 1972 pursuant to the ABM Treaty and the Interim Agreement to promote the implementation of those agreements and the Accident Measures Agreement of 1971. The SCC provides a permanent arrangement by which the Parties are able to conduct in confidence bilateral discussions on arms control procedures and verification matters relating to strategic weapons.

Since the SALT II Treaty had not been ratified and had not entered into force, the obligations of the Parties with respect to the functions of the SCC regarding that Treaty also had not formally entered into force. Therefore, since the US decision in May, the Parties no longer discuss SALT II in the SCC.

During 1986, the Commission met three times in Geneva to discuss compliance issues of concern to the two sides. The first regular session of 1986 (SCC-XXX) was held from March 4 to April 23; a special session was held from July 22 to July 30, and the second regular session (SCC-XXXI) from October 1 to November 13. As noted above, the special summer session was at the request of the Soviet Union. The purpose of the session was to respond to Soviet questions and concerns about President Reagan's May 27, 1986, decision on interim restraint and to hear Soviet responses to US concerns about Soviet noncompliance with the SALT agreements. The United States also used the opportunity to renew President Reagan's call for the Soviet Union to join the United States in establishing an interim framework of truly mutual restraint pending conclusion of an equitable and verifiable agreement for deep reductions in offensive nuclear arms.

ACDA provides the US Component of the Commission a Washington base of operations and plays a leading role in interagency preparation for the SCC sessions by chairing the SCC Backstopping Committee. In addition, members of the ACDA technical and legal staffs serve as members of the advisory staff of the US Component of the Commission during its sessions in Geneva.

Nuclear Testing

After several unsuccessful US initiatives designed to achieve Soviet agreement to improvements of the verification provisions of the unratified Threshold Test Ban Treaty (TTBT) and the Peaceful Nuclear Explosions Treaty (PNET), the United States and the Soviet Union, in July 1986, began bilateral discussions at the expert level on nuclear testing issues. The sides agreed they could discuss the entire scope of issues related to nuclear testing, without preconditions. Sessions were held in Geneva July 25-31, September 4-17, and November 13-25. The United States has made it clear that its highest priority in nuclear testing limitations is effective verification provisions for the TTBT and PNET. Following agreement on such provisions, President Reagan has publicly stated his intention to move forward on ratification of these treaties.

Nuclear test limitations, consistent with US national security, continue to be an element of the arms control policy of the United States. Now, and for the foreseeable future, the United States and its allies must rely upon nuclear weapons to deter Soviet aggression. US testing is required to sustain the continued effectiveness of our deterrent, and to ensure the reliability, security and safety of the US arsenal. At the same time, the United States tests neither more frequently nor at yields higher than is absolutely necessary to meet its national security requirements. Given the scope and scale of the Soviet strategic military buildup, it is vital that the United States maintains the essential strategic balance which has enabled it to keep the peace between East and West for four decades.

Since 1976 the United States has abided by the 150 kiloton (KT) yield limit of the TTBT and the PNET. Although neither side has ratified these treaties, the United States and the Soviet Union have pledged to observe the 150 KT limit so long as the other does. However, experience has shown that the United States cannot effectively verify Soviet compliance with these treaties as they now stand. Furthermore, while ambiguities in the pattern of Soviet testing and verification uncertainties remain, the 1985 President's Report on Soviet Noncompliance with Arms Control Agreements found that Soviet nuclear testing activities for a number of tests constitute a likely violation of legal obligations under the TTBT.

At the Reykjavik meeting, the President informed Soviet General Secretary Gorbachev that, if the USSR were to agree to essential TTBT/PNET verification procedures which could be submitted to the Senate for its consideration, he would request the Senate's advice and consent to TTBT and PNET ratification. The President also stated that, if the Soviets fail to agree to the required package of verification improvements prior to the convening of the 100th Congress, he would still seek Senate advice and consent, but with an appropriate reservation that would ensure the treaties would not enter into force until the President could certify that they were effectively verifiable. Finally, the President stated that once US TTBT/PNET verification concerns have been satisfied and the treaties have been ratified, the United States would be prepared -- in association with a program to reduce and ultimately eliminate all nuclear weapons -- to engage immediately in negotiations with the Soviet Union on ways to implement a step-by-step parallel program of limiting and ultimately ending nuclear testing.

A comprehensive test ban remains a long-term objective of the United States. Such a ban must be viewed, however, in the context of a time when we do not need to depend on nuclear deterrence to ensure international security and stability and when we have achieved broad, deep, and verifible arms reductions; substantially improved verification capabilities; expanded confidence-building measures; and greater balance in conventional forces.

MULTILATERAL ARMS CONTROL

Activity in multilateral arms control received a new impetus in 1986. Progress was recorded in some areas and new approaches and fora were sought in other areas, reflecting, perhaps, the optimism generated in the world community by the possibility of progress in US-Soviet nuclear negotiations.

From an arms control perspective, the US objective in multilateral arms control is to encourage the international community:

- To engage in concrete and verifiable undertakings designed to increase openness, enhance stability, lower military confrontation, and reduce armed forces; and
- To recognize the need for effective verification and its responsibility in demanding full compliance with obligations undertaken.

During 1986, the major focus of multilateral arms control activities continued to be the Conference on Disarmament in Geneva, the Mutual and Balanced Force Reduction (MBFR) talks in Vienna, the Conference on Confidence and Security-Building Measures and Disarmament in Europe (CDE) in Stockholm, and the First Committee of the United Nations General Assembly in New York.

The major achievement in multilateral arms control during 1986 was the successful conclusion of the Stockholm CDE. But this success has led to searching questions about the role of security issues in the Conference for Security and Cooperation in Europe (CSCE) process; how to ensure balance among all the objectives of the CSCE, including human rights, and the future course of conventional arms control in Europe.

Another major event was the holding of the Second Review Conference of the 1972 Biological Weapons Convention (BWC) in September. Other events during the year included the intensification of both multilateral and bilateral negotiations on an effective and verifiable comprehensive ban on chemical weapons, and bilateral discussions to prevent the proliferation of such weapons.

Conference on Disarmament

The forty-nation Conference on Disarmament (CD), in operation since 1979, is the principal international forum for the negotiation of multilateral arms control agreements. In addition to the United States, the CD includes all the other nuclear weapon states, a number of Western and Eastern states, and twenty-one neutral and nonaligned states. The CD meets in Geneva for two sessions each year, the first lasting from February through April, and the second June through August. In addition, intersessional consultations devoted solely to chemical weapons negotiations took place January 6 to February 4 and November 24 to December 17.

Chemical Weapons

Negotiations on a comprehensive and verifiable ban on chemical weapons (CW) were more active in 1986 compared with recent years, due largely to a new readiness by the Soviet Union to address the substantive issues involved. Nevertheless, in terms of importance of the issues still outstanding and the amount of work yet to be accomplished, progress towards an effective treaty must be judged to be modest.

In the CD's ad hoc Committee on Chemical Weapons, advances were made in defining which chemicals would be subject to the provisions of a CW treaty. Agreement was reached that the declaration and destruction of CW production facilities would be verified by on-site inspection. In addition, some procedures were outlined for on-site verification of the destruction of CW stockpiles. But many important aspects of these complex issues remain to be worked out. Meanwhile, on a number of key issues (the declaration of CW stockpiles, conversion of CW production facilities, monitoring of the chemical industry, and challenge inspection) major substantive disagreements continue to exist among participants. The

US draft treaty, submitted to the CD by Vice President Bush in 1984, remains the most detailed and comprehensive proposal on the table.

Pursuant to the November 1985 Summit mandate to accelerate CW negotiations, US-Soviet bilateral discussions continued in 1986 on an intensified basis, complementing the multilateral negotiations in the CD. Four separate sessions of these talks have been held. Also, in accordance with the decision at the 1985 US-Soviet Summit to open a dialogue on ways to prevent the dangerous proliferation of CW, US and Soviet representatives met twice during 1986 to exchange ideas and address areas of concern. The United States also held informal discussions with other countries to discuss ways to optimize export controls on specific chemicals related to the manufacture of CW.

The United States continues to place high priority on achieving an effectively verifiable treaty banning CW. Inherent in our willingness to accept such limitations affecting vital US national security interests is our insistence upon the need for effective verification, including detailed exchange of information, and challenge inspection without right of refusal of facilities which might be used to produce or store forbidden chemicals. While Soviet officials have been publicly touting new willingness to accept verification, they have yet to agree in the actual negotiations to measures which would comprise an effective verification regime.

Radiological Weapons

The ad hoc Committee on Radiological Weapons was reestablished in 1986. Without dividing its work into two separate "tracks", the Committee continued its examination of the two major questions it has faced for a number of years: (1) the prohibition of radiological weapons and (2) the prohibition of attacks against peaceful nuclear facilities. On both issues, major differences over substance and approach continued. The Committee's report recommended that the CD reestablish the ad hoc Committee again at the beginning of the 1987 session.

Nuclear Test Ban

The CD attempted to find a basis for continuing work on this item in an ad hoc committee of the Conference. While no delegation opposed the reestablishment of such a body, which has not met since 1983, there was no agreement on what its mandate should be. As a result, once again, a committee was not established.

The Conference's ad hoc Group of Scientific Experts to consider International Cooperative Measures to Detect and Identify Seismic Events (GSE) met twice during 1986. The Experts Group completed its report on the Technical Test which the GSE conducted in 1984-1985. The test was a lengthy exercise of methods to exchange and process large amounts of seismic data on a global basis, as envisioned for monitoring the underground environment under a future comprehensive test ban. The GSE submitted its report to the CD in August 1986 as document CD/720.

Outer Space Arms Control

In 1986, the ad hoc Committee on the Prevention of an Arms Race in Outer Space was reestablished with a mandate "... to continue to examine and to identify, through substantive and general consideration, issues relevant to the prevention of an arms race in outer space..." This Committee met sixteen times, during which the United States continued its analysis of the existing legal regime initiated last year and offered to continue reviewing new measures in this area that were verifiable, equitable, and compatible with US national security interests. Thus far, however, the United States has not identified any as appropriate for multilateral negotiations.

The final report of the ad hoc Committee recognizes that the outer space legal regime plays a significant role in the prevention of an arms race in this environment; underlines the need to reinforce that regime; and stresses the importance of strict compliance with existing agreements, both bilateral and multilateral. The report also agrees that no effort should be spared to assure that substantive work on this agenda item will continue at the next CD session. Finally, it recommends that the CD reestablish the ad hoc Committee on the Prevention of an Arms Race in Outer Space with a non-negotiating mandate at the beginning of the 1987 session.

Other Issues

The ad hoc Committee on the Comprehensive Program of Disarmament (CPD) met again during 1986. Despite intensive efforts at 21 meetings, the Committee was unable to resolve the outstanding issues. The Committee agreed to recommend to the CD that work on the elaboration of the CPD be continued during the 1987 session, with the purpose of attempting to complete preparation of a draft CPD during the first part of the 1987 session.

Agreement was not reached during 1986 on the reestablishment of the ad hoc Committee on Negative Security Assurances, which deals with effective international arrangements to assure nonnuclear weapon states that they will not be threatened by nuclear weapons. Both the re-establishment of the ad hoc Committee and the appointment of a chairman were postponed until the 1987 session.

Two additional agenda items were addressed at the CD in 1986, namely, (1) cessation of the nuclear arms race (2) and nuclear disarmament and the prevention of nuclear war. The CD held nine informal meetings devoted to the first issue. Concerning the second issue, consultations were held under the guidance of the President of the Conference to consider an appropriate organizational arrangement for addressing the issue. However, no agreement was reached.

The United Nations Disarmament Commission

The United Nations Disarmament Commission (UNDC), a subsidiary body of the General Assembly designated to deliberate on arms control and security issues, is composed of all UN member states and meets annually in New York. In contrast to the General Assembly, the UNDC does not vote on resolutions. The 1986 session of the Commission was held May 5-23 under the chairmanship of the Federal Republic of Germany. The Commission established working groups for three agenda items: reduction of military budgets, South Africa's nuclear capability, and review of the UN role in disarmament. A contact group of the Committee of the Whole dealt with the subject of nuclear and conventional disarmament. The agenda item concerning confidence-building measures was handled in informal consultations by the chairman.

The 40th UN General Assembly had adopted a resolution requesting the Disarmament Commission to consider the question of the "naval arms race." The United States voted against that resolution on the grounds that, *inter alia*, naval armaments cannot be considered for arms control purposes in isolation from other military forces. For the same reasons, the United States opposed inclusion of this issue on the UNDC agenda. The chairman undertook to conduct consultations on this issue under his own authority, but no working group was formed. The United States did not participate in those consultations.

At its final meeting, the Disarmament Commission adopted a Report to the UN General Assembly, which also contained the reports of the working and contact groups, as well as reports on the chairman's consultations on the two issues mentioned above.

United Nations General Assembly

The United Nations General Assembly held its 41st session from September 16 to December 19, 1986. The First Committee, which is responsible for arms control and security matters, began its meetings on October 13.

President Reagan addressed the General Assembly on September 22, elaborating the US approach on arms control and other issues of concern to the international community, such as human rights. The ACDA Director addressed the First Committee on October 20 to report the results of the meeting between President Reagan and General Secretary Gorbachev in Reykjavik.

The United States Delegation introduced two resolutions in the First Committee. The first condemned the illegal use of chemical weapons and expressed concern about indications of their emergence in an increasing number of national arsenals. The General Assembly adopted this resolution by a vote of 137-0, with 14 absentions. The United States considers that this overwhelming favorable vote reflects the international community's interest in the strict observance of existing international obligations regarding prohibitions on chemical and biological weapons. The second US resolution urged all states parties to arms limitations and disarmament agreements to implement and comply with such agreements and called on all UN member states to give serious consideration to the implications of noncompliance. The General Assembly adoped this resolution by consensus.

The United States also gave its support to resolutions which encouraged progress in the bilateral arms control negotiations between the United States and Soviet Union; noted the Review Conference on the BWC; welcomed the results of the Stockholm Conference; urged the CD to intensify its negotiations on a chemical weapons ban; stressed the importance of verification; and emphasized the importance of conventional disarmament.

Biological Weapons Convention Review Conference

From September 8-26, representatives of the United States and sixty-six other states parties and signatories gathered in Geneva for the Second Review Conference of the BWC, which was signed in 1972. At this Review Conference, the United States sought: a serious review of the operation of the BWC; recognition of US concerns regarding noncompliance and the obligation of states parties to respond satisfactorily to allegations of noncompliance; and a strengthening and maintenance of the international norm established by the BWC against biological and toxin weapons. The United States made very clear its conclusion that the Soviet Union had acted contrary to the provisions of the Convention prohibiting the possession, transfer and use of biological or toxin weapons. Furthermore, Soviet refusal to cooperate in addressing these US concerns was deemed contrary to Article V of the Convention.

The United States considers that the final outcome of the Review Conference generally met all of these objectives. The Final Declaration notes the view of some states that compliance was subject to grave doubt, and "stresses the need for all states to deal seriously with compliance issues and emphasizes that the failure to do so undermines the Convention and the arms control process in general." The Conference also adopted a number of informal Supporting and Strengthening Measures designed to reduce ambiguities and suspicions concerning compliance and to enhance cooperation in the field of peaceful biological activities. Of particular significance, states parties, including the USSR, undertook to exchange data on names, locations, and general activities at so-called "high containment" research centers. The Review Conference also decided to hold a meeting of scientific and technical experts in March 1987 to finalize modalities for the exchange of information and data.

Mutual and Balanced Force Reductions

Negotiations on MBFR, involving twelve members of NATO and the seven members of the Warsaw Treaty Organization, have continued since 1973.

The NATO states continued to press for an Eastern response to their proposal of December 5, 1985, wherein the West agreed to defer its long-held requirement for agreement on existing force levels prior to treaty signature. With that forthcoming proposal, the West removed what the East had long called the "major obstacle" to agreement. Taking up Soviet public statements and informal hints concerning Eastern willingness to accept effective verification measures, the West challenged the Soviet Union and its allies to move forward on the issue of verification.

It became clear during 1986 that the Soviet Union had decided against such a move despite continued and even intensified public statements to the contrary. In February 1986, the East tabled a draft treaty which represented the consolidation of the already-known Eastern position in one document. That document did not include any Eastern attempt to respond to the West's December proposal; in some instances it represented a step backward from positions the East had previously informally accepted. For example, the new draft treaty made it clear, for the first time, that the semiannual Soviet troop rotation, which involves the movement of 200,000 Soviet troops in a short amount of time twice a year, would not be required to move through the agreed exit-entry points and thus not subject to any kind of verification.

Western Alliance unity remained admirably firm throughout the year. The West was able to keep the Soviet Union on the defensive in MBFR, where their intransigence on the issue of verification remained unchanged.

In the meantime, Soviet General Secretary Gorbachev, in April 1986, presented ideas for a new negotiation on "Atlantic-to-the-Urals" force reductions. This call was echoed by the Warsaw Pact in its Budapest Appeal to NATO in June. In addition to other Soviet motives in coming forward with this suggestion, it must also be interpreted in part as an attempt to "escape forward" from the awkward position the Soviet Union found itself in MBFR. By emphasizing the wider scope of the entire European continent the Soviets attempted to distract attention from the central region where Soviet superiority is most evident and threatening. The Soviet Union may also have believed that moving force reduction negotiations to a thirty-five nation forum might result in less stringent verification requirements.

Inevitably, Gorbachev's announcement and the NATO Ministers' welcoming of Soviet acceptance of the "Atlantic-to-the-Urals" framework for force reductions, have diverted attention from the MBFR talks. Therefore, to underscore the West's view of the continued importance of MBFR negotiations for conventional arms control in Europe, Foreign Ministers of the NATO states participating in MBFR met on November 6, 1986, on the margins of the opening of the CSCE Review Conference in Vienna. They issued a declaration which reaffirmed Western readiness, on the basis of a balanced and equitable agreement, to make reductions and to accept limitations on Western forces, and expressed disappointment that the West's December 1985 proposal had so far received no constructive response from the East. Western Ministers said they continued to believe that "it is of the highest importance to address the conventional situation in Central Europe, taking full account of the current imbalance in favor of the Warsaw Pact."

The West will continue to press the East for a constructive response to the Western 1985 proposals.

The Conference on Security and Cooperation in Europe

This past year has been an especially active one for the security-related element of the CSCE.

On September 19, 1986, the CDE, in accordance with its mandate from the 1983 Madrid Concluding Document, adopted a set of mutually complementary confidence and security-building measures (CSBMs) designed to reduce the risk of military confrontation in Europe. The Stockholm Document, as the final report is called, registers the initiative among the thirty-five participating states to:

- Give notification forty-two days in advance of military activities conducted within the CDE zone which involve 13,000 troops or 300 tanks organized into a divisional structure, or at least two brigades or regiments;
- Invite at least two observers from each other participating state to notified military activities involving more than 17,000 troops;
- Exchange, each year on November 15, a forecast of its notifiable military activities for the succeeding calendar year;
- Not hold military activities involving more than 40,000 troops unless forecast in the annual calendar the year before they are scheduled to be held;
- Not hold military activities involving more than 75,000 troops unless forecast in the annual calendar two years before they are scheduled to be held;
- Permit inspections of military activities or suspected military activities on their territory within the CDE zone in the event of doubts about compliance.

In addition, the participating states pledged not to use or threaten to use force in their mutual as well as their international relations. This nonuse of force section reflects the larger Western concept of security, which includes strong commitments to human rights and compliance with international agreements.

The obligations in the Stockholm Document go into effect as of January 1, 1987. By agreement, to provide an orderly transition, the thirty-five states exchanged their first annual calendars, those for 1987 and as necessary for 1988, on December 15, 1986. Also by agreement, military activities held during the first forty-two days after January 1, 1987, will be subject to the relevant provisions of the Helsinki Final Act rather than to the provisions of the Stockholm Document.

The United States is satisfied with the Stockholm results. It extends the concept of openness in military affairs and advances the principle embodied in the Helsinki Final Act that relations among states should be based on cooperation and dialogue rather than confrontation. The Stockholm Document is particularly significant for its acceptance of the principle that any state with doubts about whether the military activities of another are in compliance with commitments has the right to conduct an inspection on that state's territory to assure itself of the situation.

For all of its significance, however, it is important to put the Stockholm results in perspective. The results represent a compromise; the West did not achieve as much as it wanted. This is especially true with regard to information exchange and inspection procedures. Continued Soviet resistance to exchanging information on its military forces and to effective inspection modalities is a serious obstacle to more ambitious efforts. Moreover, whether the objectives sought in Stockholm are really achieved will depend on whether the obligations are fully implemented and complied with, both in letter and in spirit. Finally, it must be remembered that the Stockholm Conference is only one part of the overall CSCE process, which is based on the tenet that European security and confidence in the larger sense must encompass economic, social and humanitarian cooperation and openness as well as measures in the military sphere.

The question of the future of the CDE will be decided at the CSCE Review Conference which opened in Vienna on November 4, 1986, and which is expected to last for about one year. If the US review of the results of all three CSCE baskets (security, economic, humanitarian) permit the judgment that there has been balanced progress in all three areas, the

United States would be willing for the Vienna Review Conference to reconfirm the Madrid mandate for the continuation of the CDE to negotiate additional confidence and security-building measures.

The Soviet Union argues that the Stockholm Document represents the successful conclusion of the first phase of the CDE and that the Vienna Review Conference should mandate a second stage of the CDE with the Madrid mandate supplemented to include questions of disarmament. The United States and its NATO allies believe there is more to be done in the field of military openness and that the CDE should be resumed to continue its work on CSBMs.

In the meantime, NATO ministers on December 11 issued the Brussels Declaration on Conventional Arms Control which proposes, in addition, negotiations "to eliminate existing disparities, from the Atlantic-to-the-Urals, and establish conventional stability at lower levels." Thus, the NATO foreign ministers have publicly asked the Warsaw Pact members to follow up their rhetoric in good faith by entering into a new and separate set of negotiations among the twenty-three members of NATO and the Warsaw Pact, whose forces bear most immediately upon the essential security relationship in Europe.

VERIFICATION AND COMPLIANCE

Verification is the technical, analytical, and political process by which the United States evaluates compliance with existing arms control agreements and obligations. The verification of arms control agreements may be said to have three distinct purposes:

First, verification serves to detect violations of an agreement (or to provide evidence that violations may have occurred), and hence to furnish, as far as is possible, timely warning of emerging threats to a nation's security arising from a violation of a treaty.

Second, by increasing the risk of detection and complicating any scheme of evasion, verification helps to deter violations of an agreement. The deterrent value of verification depends to a considerable extent on a potential violator's uncertainty as to the exact capability of the techniques used by the other party to monitor his compliance with an agreement -- a fact which highlights the importance of the secrecy regarding many of these techniques. This deterrent function presupposes knowledge that detection of a violation will involve some concrete response to the illicit activity.

Third, verification serves to build domestic and international confidence in the viability of an arms control agreement. At the same time, it provides an important safeguard against wishful illusions and against possible manipulation of an atmosphere of trust in the pursuit of unilateral advantage.

Soviet Noncompliance

The US Government has verified that the Soviet Union has violated provisions of most of the bilateral and multilateral arms control agreements to which the United States and the Soviet Union are parties. Three classified and unclassified versions of these Congressionally-mandated Presidential reports on Soviet noncompliance have been forwarded to Congress, in January 1984, February 1985, and December 1985. An updated report was in its final stages at the end of December 1986. ACDA played a key role in the preparation of these reports.

The reports included a thorough analysis of the Soviet Union's obligations under existing arms control agreements based upon the specific terms of these agreements and, where necessary, on the negotiating record. The US Government used the best information and analytical resources available in addressing compliance questions, and employed an extremely high standard of evidence to determine whether or not the

Soviet Union was in compliance. Careful consideration was given to possible uncertainties and ambiguities inherent in some of the evidence or analytical methods, and where these existed, no violation was charged or findings were qualified by terms such as "likely" or "probable."

Much of the data gathered by National Technical Means (NTM) of verification is sensitive, and because of the confidentiality rule for bilateral negotiations, much of the information that led to the conclusions cannot be fully disclosed on an unclassified basis. The compliance findings are, however, as comprehensive as possible within these sensitivity constraints.

After extensive study, the US Government found that the Soviet Union has violated the 1972 Anti-Ballistic Missile (ABM) Treaty, the Strategic Arms Limitation Talks (SALT) I Interim Agreement, the SALT II Treaty, the 1925 Geneva Protocol as reflected in the rules of customary international law, the 1972 Biological and Toxin Weapons Convention, the 1963 Limited Test Ban Treaty, and the 1975 Helsinki Final Act. In addition, the US Government concluded that it is likely that the USSR has violated the 150 kiloton threshold limit of the 1974 Threshold Test Ban Treaty.

The US Government has raised compliance issues with the Soviet Government on numerous occasions and through numerous diplomatic channels, including the Standing Consultative Commission (SCC), which meets twice annually. In doing so, the United States has made it perfectly clear that it expects the Soviet Union to take positive steps to correct its noncompliance and to resolve the other compliance concerns. The Soviet responses in many cases not only failed to satisfy our concerns, but often strengthened our determination that the Soviet Union has disregarded its arms control obligations and commitments. The Soviet Union has neither provided satisfactory explanations nor undertaken corrective action sufficient to resolve our concerns.

The President has offered the Soviet Union numerous opportunities to cease and reverse their noncompliance. In June 1985, the President announced that despite the Soviet pattern of noncompliance, the United States would go the extra mile and refrain from undercutting existing strategic arms agreements to the extent that the Soviet Union exercises comparable restraint. At the same time, however, the President decided that in light of the pattern of Soviet noncompliance and their massive military buildup, the United States would have to take appropriate and proportionate responses when needed to protect its own security. The Soviet Union did not exercise comparable restraint. The President's Report on Soviet Noncompliance with Arms Control Agreements, December 23, 1985, stated that:

> The Soviet Union has not provided explanations sufficient to alleviate our concerns, nor has the Soviet Union taken actions needed to correct existing violations. Instead, they have continued to assert that they are in complete compliance with their arms control obligations and commitments.

Indeed, while the United States continued to strictly observe its treaty commitments, meeting with the Soviets in the SCC and other fora to attempt to persuade them to reverse their violations and resolve our other compliance concerns, the Soviets continued to violate these same commitments.

After reviewing relevant Soviet actions and US response options, the President determined on May 27, 1986, that, in the future, the United States must base decisions regarding its strategic force structure on the nature and magnitude of the threat posed by Soviet strategic forces, not on standards contained in the SALT structure which had been undermined by Soviet noncompliance. The President also stated that since the United States would remain in technical compliance for some months, he hoped that the Soviet Union would use that period to take the constructive steps necessary to alter the situation, and that if they did so, the United States would certainly take this into account.

In July 1986, the US Government met with the Soviets for a Special Session of the SCC, at the request of the Soviet Union, to again explain this policy to the Soviets and to once again extend our offer of an interim framework of truly mutual restraint. The Soviets rejected this offer.

Soviet noncompliance has been discussed with the Soviet Union at the highest level. President Reagan has raised Soviet noncompliance, including the Krasnoyarsk radar deployed in violation of the ABM Treaty, with General Secretary Gorbachev in Geneva and again during the October 1986 talks in Reykjavik.

Effective Verification

Another important process relating to verification is the evaluation of the degree to which a prospective arms control proposal or provision is verifiable or the "verifiability" of the agreement.

The process of determining whether a prospective agreement is effectively verifiable has two phases. The first phase is a technical and analytic process which weighs the present and programmed US collection, processing, analysis and reporting capabilities against the activities proposed to be limited. This analysis must take into account credible cheating scenarios and the high standard of evidence demonstrated to be necessary within the US Government in order to reach a decision that noncompliance has occurred. This phase provides an assessment of the "degree of verifiability," or the degree to which compliance with an agreement, including the agreement's objective and purpose, can be verified by identifying those "undetectable" evasion scenarios that may be implemented should the Soviets attempt to evade the Treaty.

When the first phase is complete and the treaty-specific limitations of our technical verification capabilities have been identified, the second phase addresses whether verification is effective. This assessment takes into account the results of the first phase and considers other factors including:

- Domestic political factors;
- The costs and risks of evasion;
- The degree to which undetectable violations would pose a risk to US national security;
- The past compliance record of the treaty partner;
- The specific incentives that a party might have to violate an agreement;
- The ease and speed with which it would be possible for the United States to deny the benefits derived from noncompliance;
- The likely perceptions of the other party regarding US ability and willingness to nullify any advantages derived from noncompliance;
- The impact on the arms control environment and bilateral relations in general of potentially unresolvable compliance concerns caused by limitations in technical verification capabilities.

Arms control agreements that are not effectively verifiable can, for a variety of political and military reasons, be more detrimental than beneficial to US national security. Undetected violations could pose a severe threat to US national security. For example, the covert stockpiling or deployment of ICBMs in numbers exceeding the ICBM inventory permitted by an arms control agreement would be a serious threat because the concealed missiles could serve as a secure reserve force to be used after an initial nuclear attack, or for the purpose of nuclear blackmail during an international crisis. Furthermore, suspicions of violation or evasion based on ambiguous evidence give rise to a situation in which the complying party cannot act to counter the activity even though these may pose a possible military threat. Effective verification is therefore an essential precondition for a viable arms control agreement.

Special Challenges for Verification

In the October meetings between President Reagan and General Secretary Gorbachev, and in the November meeting between Secretary of State Shultz and Soviet Foreign Minister Shevardnadze, verification was a key topic of conversation. The US side laid out in some detail its view on the central role of verification in the arms control process and the need to concurrently negotiate measures that would provide for effective verification. In START, for example, verification ideas that were put forward call for a comprehensive exchange of data, on-site observation of reductions down to agreed levels, and an effective monitoring of remaining inventories and associated facilities, including on-site inspection. These ideas were to be applied to the Intermediate-range Nuclear Forces (INF) agreement as well.

While agreement in principle was reached, a note of caution is appropriate. While verification has always been a difficult process, numerous factors make the verification of future agreements even more complicated and crucial. The most important of these factors are: (1) the impact of the Soviet Union's record of noncompliance; (2) the scope of future agreements in which intermediate-range missiles and space systems must be considered in addition to strategic systems; (3) the aim of future agreements to reduce or eliminate forces, making the risks to a complying party greater should the other side choose to violate; and (4) advances in technology that lead to smaller, more mobile or more easily hidden weapon systems more difficult to detect.

ACDA is engaged in ongoing analysis of a series of complex issues regarding the verification of future agreements. Some of these problems are summarized below.

The Value of On-Site Inspection

On-site inspection (OSI), by observers and instruments, may play a useful role in deterring violations at agreed locations (declared sites). The utility of OSI, however, is limited in that OSI only allows the inspector to verify at the time and place of the inspection. The value of this capability depends on how easily the action being monitored by OSI could be conducted at other times and places.

Mobile Ballistic Missile Systems

The Soviet Union has underway programs for at least two new mobile ICBMs. One, the SS-X-24, is intended to be deployed in a rail-mobile as well as fixed silo mode. The other, the SS-25, is being deployed as a road-mobile system. While mobile missiles may be attractive from the standpoint of increasing crisis stability, Soviet mobile ICBMs pose special challenges for verification.

New Soviet mobile land-based systems, because of their mobility, the concealment measures associated with their deployment, and the potential commonality of systems and support facilities with other military and civilian equipment and installations, pose serious verification difficulties. The United States proposes to ban such systems and any future agreement must include measures to meet the verification challenges associated with these systems.

Biological and Toxin Weapons

In September 1986, representatives from over sixty nations gathered in Geneva for the second Biological and Toxin Weapons Convention (BWC) Review Conference. At the Review Conference, the United States sought a serious review of the operation and effectiveness of the Convention. The United States raised its concerns regarding incidents in which the Convention had been violated and the need for those concerns to be resolved. The importance of resolving uncertainties about compliance was echoed by other countries, particularly Canada and Australia. Although the United States has concluded that the convention has not been effective in the elimination of biological and toxin weapons, we reaffirmed our continuing adherence to its provisions, and to the international norm against biological and toxin weapons which was established by the Convention.

As recognized by the states parties to the Review Conference, recent advances in the field of biotechnology make effective verification of a BW agreement much more difficult today than fourteen years ago, when the BWC entered into force.

The equipment which would be used to produce BW agents, such as toxins and viruses, is indistinguishable from that in which legitimate commercial bioengineered substances are now being produced around the world. The production equipment newly evolved in the commercialization of biotechnological methods can be housed in standard industrial or manufacturing facilities that offer no distinctive sign of the kind of production activity occurring within. For example, one small bottle partially filled with glass beads whose surfaces are covered with mammalian cells ideal for growing viruses now yields quantities of product that previously would have required much larger production facilities. In addition, the new type of biological production equipment works fast: substances suitable for BW use can be synthesized within hours; test tube quantities of BW seed stocks can be fermented into large production quantities in three to four weeks.

Finally, the infrastructure required for a BW capability (e.g., munition-filling equipment, aerosolization and dissemination testing, and training) can be maintained overtly for breakout from an agreement, since it is essentially identical to the infrastructure required for a CW capability.

Nuclear Testing Verification

The provisions of the Threshold Test Ban Treaty (TTBT) provide no mechanism for reducing the level of uncertainty of yield estimation to an acceptable level. Uncertainties that have been raised by analysis of Soviet tests cannot be answered definitively, and uncertainties in the yield estimation process cannot be sufficiently reduced without direct, on-site measurement of the yield of Soviet tests with instruments which are inherently much more accurate than seismic methods.

The United States has identified in CORRTEX a measurement technique which will reduce the uncertainty in yield measurement to an acceptable level and can do so without danger of compromising other sensitive information about the nature or performance of the nuclear device whose yield is to be measured. CORRTEX is a hydrodynamic yield measurement technique that measures the rate of propagation of the underground shock wave from an explosion.

Successful implementation of a direct-yield measurement regime for verification of the TTBT will establish the principle of OSI at declared facilities -- in this case the site of nuclear tests. Joint Soviet-US discussions to establish direct yield measurements will necessarily require negotiation of all the logistical aspects of such on-site presence, including:

- o The size and composition of the technical teams that would make measurements;
- o Agreement on the quantity of equipment which can be brought into the country;
- o Identification of allowed instrumentation;
- o Inspection of equipment by the party whose test is to be measured;
- o Establishment of housing, feeding, and transportation arrangements for the team making measurements;
- o Procedures for sharing and transferring data from the country in which the test is to be performed.

Nuclear testing experts meetings (NTEM) were begun with the USSR on July 25, 1986. These meetings resulted from a proposal by President Reagan to General Secretary Gorbachev in March 1986 for meetings of technical experts to discuss nuclear testing issues. These talks were intended to enhance the exchange of information with the USSR on current monitoring technologies and programs. There were three sessions in 1986, the last of which included discussions of moving on to negotiations on nuclear testing arms control. In particular, the United States sought to reach agreement on necessary verification improvements to the TTBT and the Peaceful Nuclear Explosions Treaty (PNET) to permit their ratification. Although the discussions were businesslike, the Soviets resisted moving to such negotiation except in the unacceptable context of a comprehensive test ban.

Anti-Satellite (ASAT) Systems

Verification of a comprehensive ASAT ban would be difficult. For example, a ban on all ASAT systems would require that the existing Soviet ASAT interceptor system be eliminated. The Soviet interceptor is relatively small and is launched by a type of space booster that the Soviet Union uses for other space launch missions. It is not clear how many interceptors or boosters have been manufactured. The USSR could maintain a covert supply of interceptors that could be readied quickly for operational use, probably without the risk of US detection.

The fact that ASAT capabilities are inherent in some systems developed for other missions or are amenable to undetected or surreptitious development makes it nearly impossible to verify compliance with a truly comprehensive testing limitation that would eliminate tests of all methods of countering satellites.

Conclusions

The basic US objectives with respect to verification and compliance are to get the Soviet Union to comply with its current arms control obligations, to deny the Soviet Union the benefits of noncompliance, and to deter the Soviets from possible further or future noncompliance.

The record of Soviet noncompliance during the 1970s and 1980s suggests, however, that our verification needs include a number of related requirements. First, verification must be an intregal part of the treaty drafting process and to the greatest extent possible, provisions of agreements should be drafted to minimize dependence on data that the Soviets can deny or distort. Second, the United States should seek to attain the proper verification capabilities to meet treaty requirements. New and exciting technological opportunities should be exploited. However, some of them can be very expensive. All of these possible new initiatives could make important contributions to US verification capability.

Finally, we must recognize that if the Soviets believe that they can violate with impunity, no verification regime, however strong, can deter violations. For arms control to add to international stability and to US and allied security, it must be maintained as a viable structure by all states. Unless it is made clear that compliance is "cheaper" for the Soviets than violations, they will have no incentive to comply.

NUCLEAR NONPROLIFERATION

The Treaty on The Non-Proliferation of Nuclear Weapons (NPT) and the International Atomic Energy Agency (IAEA) are the two central nonproliferation institutions. During 1986, efforts continued to strengthen them and the other elements of the nonproliferation regime. All of the components of national nuclear commerce were reviewed to ensure that they meet the legitimate needs of foreign civil nuclear programs and that they promote US nonproliferation objectives and do not increase the risk of nuclear proliferation. This included a review and tightening of US nuclear export policies, negotiations between the United States and Japan on a new civil nuclear cooperation agreement, preparations for a UN conference to be held in 1987 on the peaceful uses of nuclear energy, and regular discussions with the principal countries involved in nuclear export activity.

Considerable attention was also paid to developments during 1986 with regard to countries that have held open the option to acquire nuclear explosives, or that otherwise are suspected of harboring such ambitions. Efforts were made to convince these states that NPT adherence, full-scope IAEA safeguards, and conformance with accepted worldwide nonproliferation norms would enhance international peace and security.

Buttressing Nonproliferation Institutions

The NPT, with 135 parties, is the most significant and widely supported measure to prevent the spread of nuclear explosives to additional countries. The nonnuclear powers that join this Treaty pledge not to acquire nuclear explosives and agree to accept international inspection by the IAEA of their entire nuclear programs. Even more importantly, by their adherence to the NPT, these countries endorse nonproliferation as a norm essential to international stability.

The 1985 ACDA annual report noted the success of the 1985 NPT Review Conference, which endorsed the NPT as important to the security of all nations. This endorsement gave momentum to efforts in 1986 to promote additional adherence to the NPT. Since the 1985 Review Conference, five countries have joined the NPT -- North Korea, Malawi, Colombia, the Yemen Arab Republic, and Trinidad and Tobago.

North Korea's adherence was especially important since its decision to join the NPT guarantees that its expanding nuclear activities will be subject to international safeguards administered by the IAEA. Such safeguards on North Korean nuclear activities should go far to allay suspicions that could undermine the stability of the Korean peninsula.

In support of the NPT, the United States has long sought to provide parties to the Treaty with special preference in regard to US nuclear exports. By law and policy, the United States may provide only minor assistance to non-NPT nonnuclear-weapon states that have nuclear activities not subject to international safeguards; all significant nuclear exports and the vast majority of all US assistance to foreign civil nuclear programs go to NPT parties. The United States also demonstrates preferential treatment of NPT parties through a voluntary contribution to certain IAEA technical assistance programs.

Nuclear Weapons Free Zones

Treaties establishing Nuclear Weapons Free Zones are another approach to preventing the spread of nuclear explosives. The first such treaty in a populated region of the world is the Treaty for The Prohibition of Nuclear Weapons in Latin America, also known as the Treaty of Tlatelolco after the suburb of Mexico City where the Treaty was opened for signature in 1967. Such regional initiatives can complement the NPT and demonstrate commitment to nonproliferation.

The Treaty of Tlatelolco is in force for twenty-three Latin American countries. While the Treaty is not yet in force for Argentina, Brazil, Chile, and Cuba, it does offer them the opportunity to provide each other with an internationally binding commitment not to acquire nuclear weapons and a commitment to accept international inspection of all their peaceful nuclear activities.

The United States has long supported the Treaty of Tlatelolco and has ratified the Protocols to the Treaty. Countries for which the Treaty of Tlatelolco is in force and which have acceptable IAEA safeguards agreements in force are eligible for the same preferential treatment for US nuclear exports and assistance as NPT parties. In 1986, there were continued efforts to promote entry into force of this Treaty for all nations in Latin America, but there was no progress.

There were additional consultations during 1986 on the South Pacific Nuclear Free Zone Treaty (SPNFZ). This Treaty, opened for signature in 1985, came into force in December 1986. It has three Protocols that the United States is eligible to join.

International Atomic Energy Agency: Political Developments

The IAEA was created in 1957, with the strong support of the United States. Its objective is to promote the peaceful uses of nuclear energy under a system of safeguards designed to guard against diversion of nuclear material to military use. Over the years, this Agency has evolved into one of the most effective international organizations. It provides the underpinning for international nuclear commerce, serves as an important mechanism to verify peaceful use commitments under the NPT, promotes the economic well being of developing countries through its assistance in peaceful nuclear applications, and increasingly has become the focal point for international cooperation on nuclear safety.

On April 26, 1986, the Soviet Union's Chernobyl power station experienced the most severe reactor accident in the history of the nuclear age. An explosion ripped through Reactor Number 4 at this station, spewing radioactive debris for thousands of miles. In the aftermath of this tragedy, there were calls for increased international cooperation on nuclear safety. President Reagan and six allied leaders at the May Economic Summit in Tokyo called for improved efforts to ensure that there is timely notification of such accidents and that foreign emergency assistance is available.

As a result of this accident, the IAEA was the focus throughout 1986 for international cooperation. There was a special meeting of the IAEA Board of Governors in May which laid out a program for dealing with the issue. Two conventions were negotiated under IAEA auspices and opened for signature in September. These conventions (1) called for other countries and the IAEA to be notified if the consequences of a significant accident are likely to carry across national borders, and (2) established a framework that would facilitate international cooperation in providing emergency assistance. The IAEA also has led an international conference at which the USSR issued a report and answered questions about its own investigation into the causes and consequences of the accident. In September, there was a Special Session of the IAEA General Conference on nuclear safety that provided high level political support to the IAEA's enhanced safety efforts and endorsed the two conventions noted above. The United States and fifty other countries signed the conventions at that time; the Administration expects to submit them to the Senate for advice and consent in early 1987. Finally, the IAEA is augmenting its budget in 1987 to increase assistance to member states in the area of nuclear safety.

Other noteworthy IAEA events during 1986 involved the treatment of Israel and South Africa at the IAEA General Conference in September. For the second consecutive year, the General Conference refused by a decisive margin to go along with efforts by Iraq to impose sanctions on Israel for destroying the Iraqi Osirak nuclear research reactor in 1981. The United States has strongly opposed efforts to raise such political issues at the IAEA, arguing that they interfere with carrying out the IAEA's responsibilities in the areas of safeguards, safety, and assistance to developing countries.

With respect to South Africa, a resolution was passed at the General Conference that calls for the IAEA Board of Governors to consider recommending to the 1987 General Conference that South Africa be expelled from the IAEA. The United States strongly opposes and condemns South Africa's apartheid system but does not believe there are grounds under the IAEA statute for expelling South Africa from the Agency. The United States also believes that such action would virtually doom ongoing efforts to expand the coverage of IAEA safeguards in South Africa. South Africa is not a party to the NPT and has several nuclear facilities that are not subject to international inspection by the IAEA.

Finally, in June 1986, the IAEA Board of Governors approved a first-ever comprehensive safeguards agreement with a country not a party to either the NPT or the Treaty of Tlatelolco. Under this agreement Albania agreed to accept IAEA safeguards on all its nuclear facilities. This approach offers an alternative to countries that do not wish to join the NPT, but are prepared to demonstrate the peaceful intent of their nuclear programs.

International Atomic Energy Agency: Safeguards Developments

The IAEA also plays a key role in nonproliferation by administering a system of safeguards that provide assurances to all states that safeguarded activities are devoted to peaceful purposes. The system is designed to deter the diversion of nuclear materials used in peaceful activities and to detect a diversion, if one were to occur. It comprises a comprehensive mixture of accountancy procedures, on-site inspections, and technical measures. Legally, the application of safeguards rests on more than 160 safeguards agreements between the IAEA and nearly 100 of its member states.

In carrying out these safeguards responsibilities, the IAEA, as stated in its 1985 Annual Report, applied safeguards on about 9,000 kilograms of separated plutonium; on about 155,000 kilograms of plutonium in irradiated reactor fuel; on over 12,000 kilograms of high-enriched uranium; on almost 25,000 tons of low-enriched uranium; and on some 43,000 tons of natural and depleted uranium. Nearly 500 nuclear facilities were covered, primarily in those nonnuclear weapon states where safeguards are applied to all peaceful nuclear activities. IAEA safeguards activities also include nearly 2,000 inspections per year, the verification of 9,000 seals, the analysis of 1,300 samples, and the recording of some 600,000 data entries into the IAEA's computer.

The United States strongly supports a vigorous program of diplomatic and technical assistance to ensure that the IAEA remains a viable institution able to carry out its safeguards responsibilities in a competent and efficient fashion. ACDA plays an integral part in these efforts and devotes substantial resources to strengthening safeguards. In 1986, the Department of State, the Department of Energy, ACDA, and the Nuclear Regulatory Commission continued to work in concert to improve the application of safeguards and to increase financial and human resources to meet additional safeguards obligations. ACDA safeguards experts worked directly with the IAEA on defining specific long-term safeguards goals, developing safeguards approaches and inspection activities, evaluating safeguards effectiveness, setting up quality control programs, and promoting US interests in IAEA staffing to ensure continued effectiveness. Under ACDA leadership, teams of safeguards experts met regularly with representatives of certain key allies to address problems which may be most efficiently resolved bilaterally. ACDA also played a lead role in developing advanced safeguards concepts for future civilian nuclear facilities which will process or use separated plutonium as a nuclear fuel.

Physical Protection of Nuclear Materials

The protection of nuclear materials from theft by terrorists and subnational groups is the responsibility of individual national governments. Recognizing that national views on terrorism and the ability to protect against and respond to a terrorist threat can vary widely, ACDA is working with other US agencies to develop international initiatives to reduce the risk and consequences of the theft of nuclear materials.

One example is the effort exerted to gain international support for the Convention on the Physical Protection of Nuclear Materials. The Treaty defines minimum standards of protection of nuclear material in transport, provides a framework for cooperation in recovery and protection of stolen nuclear material, and contains procedures for international cooperation in the event of theft of nuclear material. It also defines serious offenses involving nuclear material for which parties are obligated either to prosecute or extradite the offenders. As of August 1986, there were twenty parties to the Convention, with twenty-one needed for the Convention to enter into force; twenty-six states and organizations have signed but not yet ratified the Convention.

While the Convention provides general guidelines for the level of physical protection for various categories of nuclear materials in international transport, specific procedures and technical measures depend on the individual characteristics of the shipment, for example, mode of transport, route, and type of material. For shipments of plutonium and high-enriched uranium, in particular, ACDA has played a major role in developing detailed guidelines that will ensure that such nuclear materials receive adequate protection.

ACDA has also contributed to development of technologies which will lessen the commerce in weapons-usable nuclear materials. In 1978, the program for Reduced Enrichment in Research and Test Reactors (RERTR) was initiated to minimize international commerce in high-enriched uranium, a material that can be used in nuclear explosives. Administered by the Department of Energy through Argonne National Laboratory, the program aims to develop, test, and qualify new research reactor fuels that can be substituted for high-enriched uranium fuels currently in use. During 1986, a plan to demonstrate these new fuels was underway in the Oak Ridge research reactor. This plan is demonstrating the viability of the new, high-density silicide fuel that can convert most of the world's research reactors from the now required high-enriched uranium. If the technical achievements of the plan continue as anticipated, by 1990 the amount of US high-enriched uranium exported for foreign research reactors should begin to decline dramatically from its present level to about 1,000 kilograms annually.

In anticipation of a steep rise in the next decade of the number of shipments of nuclear material and the number of nuclear facilities under IAEA safeguards, ACDA has explored new technologies which can enhance the effectiveness and efficiency of the IAEA and national physical protection systems. Since 1977, ACDA has been engaged in exploring new concepts for remotely monitoring inventories and shipments of nuclear materials. The REmote COntinual VERification (RECOVER) system was developed for applications of international safeguards. In 1986 the TRANsport by SEA VERification (TRANSEAVER) system was successfully tested on a voyage between the United States and Japan. TRANSEAVER monitors the security status and location of nuclear materials shipped on the high seas. As a next step, ACDA has initiated cooperation with the Japan Atomic Energy Research Institute to develop a remote monitoring and communications system that could be used on air shipments. These efforts have sparked international interest in the applications of remote monitoring technology to safeguards and to other areas of arms control, including the verification of agreements on the reduction of chemical weapons.

Domestic Nuclear Export Control Efforts

Several important steps were taken by the Executive Branch in 1986 to improve domestic nuclear export controls. First, regulations administered by the Department of Energy governing the transfer of unclassified nuclear information were revised to give the United States greater control over certain activities of proliferation concern, while clarifying the regulations for the benefit of US exporters.

Second, there also was a major interagency effort to develop guidelines for implementation of nonproliferation controls on computer exports. These new guidelines are designed to prevent computer exports to activities of proliferation concern, while reducing the administrative burden imposed on the much larger number of computer exports to legitimate business activities. The guidelines also provide for greater consistency in the processing of computer export license applications. In a related but separate exercise, security safeguard guidelines were developed for the export of supercomputers to regions not previously considered for such exports.

Peaceful Uses of Nuclear Energy Conference (1987)

A major UN Conference on the Promotion of The Peaceful Uses of Nuclear Energy (PUNE) is scheduled for March 23 to April 10, 1987, in Geneva. The Conference will examine principles universally acceptable for international cooperation in the peaceful uses of nuclear energy; ways and means for the promotion of such cooperation; and the role of nuclear power and other peaceful applications for social and economic development. The Conference grew out of concern by nonaligned countries in the late 1970s that the nuclear supplier states were using nonproliferation concerns to make it more difficult for the developing countries to acquire nuclear technology.

The United States is prepared to work with other countries to identify practical ways to enhance peaceful nuclear cooperation. ACDA has been heavily involved in the development and implementation of the US approach to the Conference. We intend to support sound nonproliferation standards and to ensure that the Conference does not erode the effectiveness of the IAEA as the central agency providing technical assistance to developing countries.

Bilateral Non-proliferation Discussions

The 1978 Nuclear Non-Proliferation Act (NNPA) modified significantly the laws regarding US peaceful nuclear cooperation with other countries. One major element of that Act was a requirement that the President establish a program to renegotiate all existing agreements for cooperation in order to incorporate the new conditions specified for all such new agreements.

United States-Japan Discussions

Negotiations on a new agreement with Japan have been underway since 1982. They accelerated in 1985-1986 and there was significant progress during the year towards completion of this agreement. In return for Japan's acceptance of various new obligations required by the NNPA, the agreement will establish a long-term framework for the exercise of US concessional rights over Japan's processing and use of plutonium in its civilian nuclear program. However, a continuation of this long-term consent arrangement will be conditioned on meeting statutory requirements; on cooperation in ensuring the best possible IAEA safeguards on plutonium; on achieving acceptable levels of physical protection on plutonium, particularly in international transport; and on the continued support for nonproliferation measures.

US-Soviet Consultations

A regular feature of enhanced international cooperation on nonproliferation over the past ten years has been consultations among the major exporters of nuclear material and equipment. These countries have many objectives and interests in common, and it is natural that such discussions should take place. US consultations with its key allies are frequent and informal and take place at various diplomatic levels. They may occur as frequently as ten times a year.

A more formal series of nonproliferation discussions with the Soviets has developed in the past several years. Since the fall of 1982, regular meetings have been held, even when overall US-Soviet relations were at a low ebb. There were two meetings in 1986, one in Moscow in July and the other in Washington in December.

These meetings last three to four days and include opening and closing plenary sessions chaired by the heads of delegation. Two working groups also meet and discuss a full range of issues in considerable detail. There are also private meetings between the heads of delegation. The agenda for these meetings is exhaustive. Issues discussed include a general assessment of the nonproliferation regime, current cooperative efforts among the major supplier countries, status of efforts to increase adherence to the NPT, export controls, ways to improve IAEA safeguards, and other issues involving the IAEA. The working groups probe these topics in considerable detail and provide written reports to the plenary.

These consultations reinforce the common interests of the United States and Soviet Union in nonproliferation, promote a better understanding of views and develop excellent US-USSR staff-level interaction due to the detailed discussions in the working groups.

Problem Country Issues

South Asia

India's nuclear test in 1974 and Pakistan's efforts beginning in the early 1970s to develop an unsafeguarded nuclear program have placed this region in the forefront of proliferation concern for many years.

During 1986, the United States continued its ongoing diplomatic efforts to promote a regional solution to the problem of nuclear proliferation in South Asia. High-level United States Government officials have repeatedly stressed to both India and Pakistan that a nuclear arms race on the subcontinent would be in neither side's interest. The United States has also urged both sides to exercise unilateral restraint in the nuclear area and to search for a suitable bilateral arrangement to head off proliferation.

The President certified in 1986 that Pakistan does not possess a nuclear explosive device and that the US security assistance program significantly reduces the risk that Pakistan will possess such a device, thereby satisfying the legal requirement for continued security assistance to Pakistan. The United States has made clear to the Government of Pakistan, however, that this certification does not in any way constitute US approval of Pakistan's unsafeguarded nuclear program, and that we have serious concerns about the overall nature and direction of Pakistan's nuclear program.

There have been reports that Pakistan is continuing to explore the possibility of acquiring a power reactor from a foreign supplier. In response to these reports, the United States continued its diplomatic efforts during 1986 to discourage other suppliers from exporting a power reactor to Pakistan unless it accepts IAEA safeguards on all its nuclear activities.

Also during 1986, the United States continued to approach other supplier countries with regard to individual exports that could assist nuclear facilities in India and Pakistan that are not subject to IAEA safeguards. Although such export control efforts cannot provide a long-term solution to the threat of proliferation in South Asia, they can buy time for a political solution to the problem.

Latin America

Argentina and Brazil have the largest nuclear programs in Latin America, and their attitudes toward nonproliferation are key to ensuring that this region does not ultimately experience the same kind of instability that India's and Pakistan's nuclear programs are causing in South Asia. Relations between Argentina and Brazil are not fraught with the historical animosities of many other regions, and both countries have recently elected civilian leaders who have publicly disavowed any interest in nuclear weapons. However, both countries oppose the NPT as "discriminatory" because they claim it does nothing about existing US and Soviet nuclear arsenals, and neither has brought the Treaty of Tlatelolco into force. Both countries also have nuclear facilities not subject to IAEA safeguards.

In an effort at mutual reassurance, there have been discussions over the past two years between Argentina and Brazil about increased cooperation in the nuclear area, including the question of enhancing confidence in the declared peaceful nuclear programs of each country. The United States continues to urge both countries to accept IAEA inspection on all their nuclear facilities and to bring the Treaty of Tlatelolco into force. But we also encourage any bilateral efforts that would have the effect of reducing the chances that their unsafeguarded nuclear activities will over time increase mistrust and suspicion.

The United States maintains an active dialogue with Argentine and Brazilian nuclear officials through periodic bilateral consultations. While the United States does not see eye-to-eye with these countries on all nonproliferation issues, these discussions permit the exploration of areas where there is a commonality of interest. Consultations continued in 1986 and included discussions of export control policies, cooperation between our countries in areas such as safeguards and nuclear waste management, a range of issues associated with the IAEA, and nuclear issues in other regions.

Middle East

The Middle East is a region where the threat of nuclear proliferation continues to pose serious risks to regional and US security interests. The nuclear intentions and programs of Iran, Iraq, Israel, and Libya demand particular attention. The United States continues to believe that Middle East security would be enhanced if all states in the region would join the NPT and would place all their nuclear facilities under IAEA safeguards. Further, the volatility of this region also requires special restraint on the part of nuclear suppliers which may be contemplating assistance to civil nuclear programs in the region.

During 1986, all non-NPT parties in the region, including Isreal, were approached and urged to join the NPT. Since Israel has nuclear activities not subject to IAEA safeguards, the United States will not provide significant assistance to Israel's civil nuclear program, and we have urged other nuclear supplier countries to exercise similar restraint.

ARMS AND TECHNOLOGY TRANSFERS

In 1986, ACDA continued to participate in the formulation and implementation of US policy on the transfer of conventional arms and military technology in order to ensure that arms control considerations are fully factored into the arms transfer decision-making process.

ACDA's arms transfer activities are carried out within the framework of Administration policy and long-standing statutory requirements. The President's conventional arms transfer policy, enunciated in July 1981, recognizes that arms transfers, judiciously used, can help deter aggression, demonstrate our enduring interest in the security of friends and partners, and foster regional and internal stability. By helping to enhance stability the United States can encourage evolutionary change and the peaceful resolution of disputes in various parts of the world. Conventional arms transfers and security assistance can also play an important role in supporting our efforts to dissuade nations from considering the acquisition of nuclear weapons. By helping friends and allies meet their legitimate defense needs, conventional arms can contribute to the self-confidence of such countries in their own security, thereby reducing possible pressures to acquire nuclear explosives.

Under the President's policy, each request for arms is carefully reviewed on a case-by-case basis, primarily in terms of its net contribution to enhanced deterrence and defense. A wide range of factors, including arms control factors, are considered in evaluating prospective transfers. These include: whether the transfer is consistent with US interest in maintaining stability within each region; whether the proposed transfer can be absorbed without overburdening the recipient's military support system or financial resources; and whether possible detrimental effects of the transfer are more than counterbalanced by positive contributions to US and regional interests and objectives. Requests for coproduction or transfer of sensitive technology receive special scrutiny. Recognizing that first-line systems may not be appropriate to the needs of all countries, careful consideration is also given to alternatives, including adaptations of US military equipment.

Under the Arms Export Control Act and the Foreign Assistance Act of 1961, as amended, decisions to transfer arms or provide military assistance are coordinated with the Director of ACDA, and the Director's opinion is taken into account on the extent to which proposed transfers or military assistance might:

- Contribute to an arms race;
- Increase the possibility of outbreak or escalation of conflict; or
- Prejudice the development of bilateral or multilateral arms control arrangements.

In carrying out this responsibility in 1986, ACDA evaluated and rendered its opinion on about 1,500 Foreign Military Sales cases and commercial requests for licenses to export military equipment. Many of these cases involved the transfer of more than one item to more than one country.

ACDA's Assistant Director for Nuclear and Weapons Control continued to represent the Agency on the senior-level interagency Arms Transfer Management Group, which assists the Under Secretary of State for Security Assistance, Science and Technology in advising the Secretary of State on arms transfer and security assistance matters. In addition, ACDA continued its participation in the Security Assistance Program Review Working Group, which focuses on the development of proposed security assistance programs and legislation. As a member of this working group, the Agency contributed to the development of the Administration's proposed FY 1988 security assistance programs in order to ensure that arms control considerations were fully taken into account in the development of these programs.

The arms trade is marked by an increasing demand by arms recipients for offsets in the form of industrial and commercial compensation as a condition of military purchases. These offsets may include coproduction, licensed production, subcontractor production, overseas investment, technology transfer, and countertrade. In 1986, ACDA continued its participation in the interagency working group which prepared for the Congress the first and second reports on the impact of offsets in defense-related exports required by the Defense Production Act Amendments of 1984. These reports address the impact of offsets on the defense preparedness, industrial competitiveness, employment, and trade of the United States.

Arms Transfers by Region

On a worldwide basis, US Foreign Military Sales and Military Construction Sales agreements -- by far the largest component of US military transfers -- declined in FY 1986 for the fourth consecutive year. Sales totaled about $7.1 billion, a drop of sixty-five percent from the peak of $20.3 billion in FY 1982 and forty-two percent below the FY 1985 level of $12.3 billion. This decline has not been offset by the rise in commercial exports over the last few years from about $2 billion to $3-4 billion annually.

With regard to particular regions, US arms transfers to Europe are directed primarily toward maintaining the strength of the NATO alliance. These transfers assist NATO allies in meeting common defense needs and in undertaking the force modernization required to compensate for the numerically superior conventional force capabilities of the Warsaw Pact.

In the Middle East, US arms transfers have continued to be directed toward bolstering the security of friendly states, offsetting heavy Soviet arms deliveries to the region, and helping to deter and contain conflict. By enhancing the security of Israel and its neighbors, the United States seeks to encourage these countries to move toward a peaceful settlement of the Arab-Israeli conflict. The United States remains committed to maintaining Israel's qualitative technological edge. Israel and Egypt continue to receive preferential treatment for security assistance funding and advanced weapons technology. In 1986, ACDA participated in a number of decisions involving the transfer of advanced weapon systems and the development of indigenous defense production to these countries.

In the Persian Gulf, the Iranian offensive at Faw early in 1986 brought the ground war closer to Kuwait and the other Gulf Cooperation Council (GCC) states. Attacks by both Iran and Iraq on tankers in the Gulf have also escalated dramatically. In this context, this past year's arms sales to Saudi Arabia, especially the air-to-air and anti-ship missiles, provided an important sign of continuing US support to the most important friendly Gulf country. The Presidential Certification and initial deliveries of the Airborne Early Warning Aircraft (AWAC) system to Saudi Arabia, and US efforts to assist the other GCC states illustrate the US commitment to enhancing collective defense capabilities against the threat posed by the Iran-Iraq conflict.

In North Africa, the United States has continued to provide military equipment to Morocco and Tunisia, both strategically located long-time US friends. The breakup of the Libyan-Moroccan union removed a thorn from the side of US-Moroccan relations, while Libyan threats against Tunisia prompted increased US support. Soviet arms influence remains strong in Libya (which received the SA-5 air defense missile system in 1986) and in Algeria, which reportedly signed a major new arms pact with Moscow. We remain interested in encouraging Algeria's diversification of arms suppliers, but this appears to be a very long-term proposition.

In South Asia, the Unites States reaffirmed its commitment to Pakistan's security by agreeing to seek a six year follow-on security and economic assistance program amounting to $4.02 billion for the period FY 1988-1993. This assistance responds to the continuing Soviet occupation of Afghanistan and Soviet/Afghan incursions into Pakistan. The new program has a larger proportion of economic to military assistance and includes more concessional credit than the previous assistance program. Pakistan continues to acquire modern US weapons and is slowly expanding its access to US defense production technology in order to build up Pakistan's indigenous defense industry. These transfers have not altered the fundamental Indo-Pak military balance, which remains heavily in India's favor by any criteria.

US military cooperation with India continues to expand slowly through a "mission areas" approach. Probably most significant to the Indians is US participation in the development of the Light Combat Aircraft (LCA), which the Indians see as a stepping-stone to ending reliance on foreign aircraft suppliers and as a conduit for transferring Western high technology into the Indian economy.

In 1986, US arms transfers to sub-Saharan Africa continued to be very limited, both in quantity and sophistication. The Soviet Union has remained the largest supplier, providing roughly half of the arms shipped to the region. US assistance to Africa has continued to emphasize economic over military assistance in a ratio of about five to one. While US military aid programs are small, they are important in helping a number of African countries to defend themselves against aggression. US military sales have been coupled with diplomatic efforts to reduce tensions in the region and to find ways to defuse tense border situations that could flare up into major military confrontations. In 1986, the largest fraction of US military exports to sub-Saharan Africa was directed toward maintaining stability in the Horn of Africa by helping to counter the threat posed by the vast amounts of Soviet combat equipment and Cuban military personnel in Ethiopia. The United States also provided military aid to countries such as Chad, Cameroon, and Niger to help deter Libyan aggression and subversion against those states. Elsewhere in Africa, the US furnished primarily military training. The United States continued its embargo on all arms transfers to South Africa.

The maintenance of peace and stability in East Asia and the Pacific remains one of the most important foreign policy objectives of the United States. Arms transfers in 1986 were directed primarily towards strengthening South Korean deterrence and defense against potential aggression by North Korea, improving the capability of Japan to defend its territory and sea lanes, increasing the ability of the members of the Association of Southeast Asian Nations (ASEAN) to deter any further Vietnamese expansion in the region, and strengthening the forces of our ally, Australia. US arms sales to China remained modest in size and defensive in purpose. Although there was some growth in FMS on a cash basis, the overwhelming volume of transfers continued to be through commercial transactions. Arms sales to Taiwan remained consistent with both the Taiwan Relations Act and the three communiques with China (Shanghai Communique of February 27, 1972; the Joint Communique on the Establishment of Diplomatic Relations of January 1, 1979; and the Joint Communique of August 17, 1982).

US arms transfers to Latin America and the Caribbean have continued to be directed toward fostering democracy in the region and ensuring the defense of friendly countries against internal and external aggression. The modest US security assistance programs for the region have been overshadowed by massive Soviet transfers of military and economic aid to Cuba and Nicaragua. From 1983-1985 Soviet-bloc aid to those two countries totaled $15.85 billion, compared to US assistance to Central America of only $3.19 billion. In 1986, US arms transfers and security assistance to Latin America went primarily to Central America, the Andean countries, and the Caribbean.

In Central America, economic and military assistance continued within the framework of a long term plan to implement the 1984 Bipartisan Commission Report on Central America. In 1986, about three-quarters of US aid to Central America continued to be in the form of economic, rather than military aid. The bulk of arms transfers during the past year went to El Salvador and Honduras to assist those countries in deterring and combating aggression in the face of the threats from Nicaragua and Communist-supported insurgents. Complementing its assistance programs, the United States has continued to give its support to the development of a verifiable peace treaty for Central America on the basis of a full and simultaneous implementation of the Document of Objectives subscribed to by the Central American and Contadora nations. These include noninterference in the affairs of one's neighbors, serious dialogue with domestic opposition groups, free elections, removal of foreign military personnel, and a reduction of armaments.

In South America, US arms transfers in 1986 were designed primarily to assist the democratic countries of the Andean region to fight the dangerous and growing threat posed by drug traffickers and insurgents. Colombia, Ecuador, Peru and Venezuela were the largest recipients.

In the Caribbean, US assistance, more in the form of economic than military aid, has been provided to support the difficult economic adjustment process and assist the Caribbean nations' efforts to modernize and professionalize their security forces. Narcotics production and trafficking is a growing problem in the region requiring resources to combat the problem.

This past year, the Dominican Republic, St. Kitts-Nevis, and St. Vincent and the Grenadines received the largest amounts of defense articles in the region.

International Controls

ACDA was a major contributor to the report on conventional arms transfers submitted by the Administration to the Congress in September 1986, in response to the International Security and Development Cooperation Act of 1985. This report examined US policies concerning the export of conventional arms and possible approaches to developing multilateral limitations on conventional arms sales.

As pointed out in the report, the United States retains a genuine interest in arms transfer restraint and remains prepared to consider specific proposals directed toward that end. However, there has been little or no serious interest in arms transfer limitations demonstrated by the Soviet Union, or for that matter, by most other arms producers. The Soviet Union remains the world's largest arms supplier and continues to use arms transfers as a major instrument for extending its influence, exploiting local conflicts, and earning hard currency. The major European suppliers place a high premium on arms exports, primarily for economic reasons -- as a means of enhancing the viability of their defense industries, earning hard currency, offsetting a negative balance of payments, and maintaining a high level of domestic employment. The problem of developing a multilateral restraint regime is further complicated by the increasing number of arms suppliers. Finally, many arms recipients oppose such a regime as discriminatory, since they do not have the capacity to produce their own arms.

Despite the obstacles to the development of a far-reaching broadly-based arms transfer restraint regime, the United States continues its efforts to identify and take advantage of opportunities to bring about practical, verifiable controls whenever such controls hold promise of contributing to regional stability and international security. In his address to the United Nations General Assembly on September 22, 1986, President Reagan reiterated the formula for peace which he had presented at the 1985 UNGA session for the five regional conflicts that are potential flashpoints for wider conflict -- Afghanistan, Cambodia, Ethiopia, Angola, and Nicaragua. The President again proposed that negotiations be initiated between the warring parties in these conflicts and that discussions between the United States and the Soviet Union be undertaken "to support peace talks and eventually eliminate the supply of arms and the proxy troops from abroad."

The United States also seeks to advance practical international controls on arms transfers by means of consultations with other suppliers through diplomatic channels and participation in international fora which consider conventional arms control issues, particularly the Geneva Conference on Disarmament and the United Nations Disarmament Commission.

Technology Transfer

In the area of technology transfer, new arms producers have been turning increasingly to the United States (as well as other major suppliers) for the technology needed to build weapon systems which are militarily and economically competitive. As a result, ACDA has focused much of its attention on the issues raised by requests for the transfer of technologies which could lead to an independent capability of Third World countries to produce advanced weapons. ACDA is particularly concerned to ensure that civil space-related technology provided to other countries is used only for peaceful purposes. This work complements ACDA's nuclear nonproliferation activities.

RESEARCH AND ANALYSIS

The Congress, in establishing ACDA twenty-five years ago, emphasized the importance of research as one of the principal functions of the new agency. The Act actually lists thirteen general areas in which research shall be directed "to insure the acquisition of a fund of theoretical and practical knowledge concerning disarmament." Over the years, ACDA has accumulated a wealth of completed research on every conceivable aspect of arms control and disarmament. Most of that research was completed by agency officers in the normal course of their assignments; other research was carried out by private contrators under contract to the agency and under reimbursement agreements with other US Government agencies.

ACDA officers have available to them the facilities of the agency library, the computer center, and the intelligence unit. Further, the regular staff is bolstered by the addition of scholars-in-residence under the auspices of the William C. Foster Fellowship Program. Much of the research has been directed to the support of the current negotiation sessions concerning nuclear, chemical, space defense, and conventional weapons and forces. Such academic disciplines as physics, chemistry and mathematics have figured largely in research activity related to the negotiations and to the preparation of Arms Control Impact Statements. Research in the social sciences, particularly economics, has been relevant indirectly to negotiation support and directly to the accumulation of a fund of knowledge on arms control and disarmament.

Economics Research

One of the objectives of arms control is the reduction of global military expenditures. Research in support of this objective has been directed to the analysis of national budgets, of military procurement, and of the relationship of military spending to other national accounts. ACDA economists, in 1986, reviewed Soviet and Eastern European countries' national accounts and prepared monographs on such issues as Gorbachev's economic reforms and their impact on the Soviet military. US defense information was analyzed and prepared for submission to the United Nations as a part of the UN military expenditures reporting program. ACDA was represented on a US delegation to NATO in April; the delegation met with colleagues from other NATO countries for the purpose of drafting an Alliance report on the impact of Gorbachev's economic reforms.

The collection and analysis of economic, military expenditure, and international trade data from 145 countries together with the reporting of such data in the annual ACDA publication, World Military Expenditures and Arms Transfers, has caused ACDA to become a leading international source for information on country military programs.

Operations Analysis and Computer Support

During the past year, there were substantial accomplishments in the areas of operations analysis and computer activities. The most important step was the expansion of a classified computer system. This system now gives all Agency personnel ready access to both classified computations and classified information retrieval.

The classified computations are required for the mathematical and statistical analyses performed in support of the development of arms control options and for the development and evaluation of effective verification provisions for these options. Studies are being performed with the use of a model which simulates the effects of a global nuclear exchange and evaluates the capability of nuclear forces. These studies will examine a variety of force structures and arms control options from both a US and Soviet point of view. They should provide some insight on the reasons for differences between the US and the Soviet Union on certain proposals and may lead to possible areas of concordance.

ACDA staff members completed several papers on the reduction in the uncertainty of seismic yield estimates that would be provided by calibration tests in Soviet test areas. These studies provided the statistical analysis and the geophysical information required for an interagency paper on threshold test ban verification which contributed to the US position for ongoing discussions with the Soviet Union. Other papers were written assessing, on the basis of seismic evidence, Soviet testing practices with regard to the 150 KT threshold limit of the TTBT.

In support of testing limitation verification requirements, ACDA provided technical and administrative management of two Defense Advanced Research Project Agency external research projects:

- Statistical Aspects of Yield Estimation. Under this program, papers were completed on methods for improving seismic yield estimation capability and compliance decision procedures.
- Nuclear Monitoring Applications Analysis. The main purpose of this project is to assess the impact of various test ban scenarios on nuclear capability and, ultimately, on strategic stability.

A number of classified information retrieval systems have been developed and are operational on the ACDA computer.

The ACDA Library

The ACDA library maintains an extensive current collection of pertinent books, periodicals, documents, and reference materials. In addition to the collection located within the ACDA office area in the Department of State Building, the library also maintains a Special Arms Control Collection, open to the public, at the Marvin Gelman Library of George Washington University.

External Research

During 1986 ACDA sponsored external research embracing a number of projects on many areas of arms control and weapons research. The topics ranged from such general subjects as avoiding war and controlling arms to the year 2000 to the specifics of IAEA safeguards for plutonium fabrication.

Some of the studies included the Soviet view of arms control issues, a mobile ICBM study, interactions between SDI and offensive ballistic missiles, technologies for strategic defense, US and Soviet dependence on space assets, telemetry in arms control verification, techniques for remote detection of chemical weapons production and storage facilities, assessment of geophysical variations across Soviet nuclear test sites, evaluation of yield estimates from individual seismic stations for test ban verification, safeguards for plutonium fabrication and storage facilities, data base for international spent fuel and plutonium disposition, cooperative measures for anti-satellite arms control, arms control verification of the SDI surveillance program, and an in-depth survey of the impact of arms control on national security and on US-Soviet relations.

Hubert H. Humphrey Fellowships in Arms Control and Disarmament

ACDA sponsors Hubert H. Humphrey Fellowships in Arms Control and Disarmament. These fellowships are designed to encourage specialized training and research in the arms control field. The program is part of ACDA's legislatively mandated responsibilities for the conduct, support, and coordination of research on arms control and disarmament policy formulation. Named in honor of Senator Humphrey, who was a strong arms control advocate, Humphrey fellowships are intended for the support of advanced graduate students who have completed all their Ph.D. requirements except for the doctoral dissertation. Candidates for the J.D. degree are also eligible for Humphrey Fellowships during their third year. Nine rounds of competition have been held since the inception of the program in 1979 and a total of 51 awards have been made to date. Four fellows were selected for Humphrey Fellowships in 1986.

William C. Foster Fellows

In December 1983, the Arms Control and Disarmament Act was amended to provide for the establishment of "a program for visiting scholars in the field of arms control and disarmament." The purpose of this program is "to give specialists in the physical sciences and other disciplines relevant to the Agency's activities an opportunity for active participation in the arms control and disarmament activities of the Agency and to gain, for the Agency, the perspective and expertise such persons can offer." The law states that the visiting scholars are to be chosen by a board chaired by the current Director and composed of all former directors of ACDA.

Six scholars were selected for its first program in 1984-85, five scholars for the 1985-86 program and one scholar for the 1986-87 program. The scholars' assignments to ACDA were effected under the provisions of the Intergovernmental Personnel Act. In honor of the first director of ACDA, William C. Foster, who died on October 15, 1984, these visiting scholars are known as William C. Foster Fellows. The currently assigned Fellows include:

Fellow & University	Bureau Assignments
Anthony Czajkowski Clemson University	Strategic Programs
Dr. Dorothy Donnelly Chatham College	Multilateral Affairs

Planning began in the summer of 1986 for the fourth year of the Program.

PUBLICATIONS

Two statutorily-mandated reports are prepared annually by ACDA: Arms Control Impact Statements (ACIS) and the Annual Report. ACDA is the key agency for preparing two other statutorily-mandated annual reports, Report on Soviet Noncompliance and Adherence to and Compliance with Agreements.

In addition to those four reports, ACDA also prepares annually two other reports which, over the years, have become useful and popular reference documents, World Military Expenditures and Arms Transfers (WMEAT) and Documents on Disarmament. From time to time, ACDA publishes reports on specific arms control issues and updates the compendium, Arms Control and Disarmament Agreements.

Arms Control Impact Statements

ACDA submits to the Congress annually Arms Control Impact Statements; this report contains details on the impact certain weapon systems appearing in the Department of Defense and Department of Energy budget requests have on arms control agreements, treaties, and positions. Those weapon systems include nuclear weapon-related programs, defense programs which exceed specified cost ceilings, and other technology and weapons systems which the Executive Branch certifies as having significant effects on arms control.

The FY 1987 ACIS document was submitted to the Congress on February 13, 1986. For the first time, this document included a section devoted to a statement of US arms control policy. In-depth arms control impact analyses on the following systems, grouped by Program Elements in specific clusters, were included in the FY 1987 Report: Strategic Defense Initiative, Airborne Strategic Offensive Systems, ICBM Programs, SSBN/SLBM Programs, Space Defense, and Chemical Weapons. All of these weapon programs were considered consistent with US arms control policy and obligations and essential to US security interests.

Work began in May 1986 on the preparation of the FY 1988 ACIS. The topics for FY 1988 are the Triad (which combines and updates the earlier analyses of Airborne Strategic Offensive Systems, ICBM programs, and SSBN/SLBM programs), the Strategic Defense Initiative, Antitactical Ballistic Missile programs, and Chemical Warfare programs.

ACDA Annual Report

Section 50 of the Arms Control and Disarmament Act requires that ACDA send to the Congress by January 31 of each year a report concerning the activities of the Agency. The report is to include a complete and analytical statement of arms control and disarmament goals, negotiations, and activities and an appraisal of the status and prospects of arms control negotiations and of arms control mearues in effect. This edition is our twenty-sixth report.

Arms Control Compliance

ACDA is the lead agency in prepared the President's annual submission to Congress, Report on Soviet Noncompliance. The report present in detail an evaluation of Soviet actions with respect to arms control obligations. The fourth Presidential report in this series was in the final stages of preparation as of the end of December 1986.

ACDA prepares and the President submits to the Congress annually, Adherence to and Compliance with Agreements; this report contains details of the process by which the US Government ensures US compliance with its arms control obligations, detailed responses to Soviet charges of US noncompliance, and an evaluation of other nations' compliance with international arms control agreements.

World Military Expenditures and Arms Transfers

The Agency's responsibilities include informing the public on arms control issues and the yearly publication of World Military Expenditures and Arms Transfers is an important part of this effort. Copies of all editions of WMEAT are circulated throughout the world.

The 1986 WMEAT provides a compilation of worldwide military and other relevant statistics as well as essays on related topics. It contains data on military spending, armed forces, arms transfers, Gross National Product, central government expenditures, and population data for 145 countries over the period 1974-1984. Arms transfers data are provided through 1985. It is the most comprehensive source of this type of information available and is widely used by scholars, journalists, universities, government agencies, research institutions, and other interested parties.

In addition to a foreword by the Director of ACDA and commentaries on the statistical findings, the 1986 edition contains essays on Third World arms exports, trends in China's arms trade, the effects of military spending on economic growth and development, and the use of force ratios to measure military effort.

Documents on Disarmament

The 1983 and 1984 volumes of ACDA's historical series, Documents on Disarmament, were released during 1986. Each volume of the series, which has been issued for each year since 1960, documents significant arms control and disarmament undertakings through publication of treaties, agreements, laws, reports, statements, resolutions, communiques, proposals, declarations, and speeches of both US and foreign origin. Volumes are available to the public through the US Government Printing Office.

Occasional Publications

During the year ACDA published the following reports: The Soviet Propaganda Campaign Against SDI in August and The United States Arms Control and Disarmament Agency: The First Twenty-five Years in October.

ACDA ORGANIZATION

ACDA, organized under the Director, includes four bureaus and four offices. Each bureau, under the direction of an assistant director appointed by the President and confirmed by the Senate, is further broken down into divisions, each responsible for specific areas of ACDA's mandate. Its authorized full-time equivalent personnel complement during the year reached 208, with an additional fifty-seven positions approved for detailees from the Department of State and the Department of Defense.

Office of the Director

The Director and Deputy Director advise the President, the National Security Council, the Secretary of State, and other senior government officials on arms control and disarmament matters, and their relationship to other aspects of overall national security policy. The Director is responsible for all ACDA operations and activities.

The Office of the Director provides policy guidance to all ACDA elements and includes the following distinct areas of responsibility:

The Counselor

The Counselor assists the Director and Deputy Director and serves as a principal adviser on all aspects of ACDA's operations and as a link between the Director and top decision makers within ACDA and in other agencies.

The Executive Secretary

The Executive Secretary directs and coordinates staff work for the Director, directs substantive issues and studies, and assists the Director in keeping policy, organizational, and functional aspects of arms control matters in phase.

The Special Representatives for Arms Control and Disarmament Negotiations

The Special Representatives for Arms Control and Disarmament Negotiations, appointed by the President with the advice and consent of the Senate and with the rank of Ambassador, advise the President and the Secretary of State on international arms control negotiations and related matters.

The Office of Negotiations on Nuclear and Space Arms

The Office of Negotiations on Nuclear and Space Arms in Geneva was established by the State Department as a diplomatic mission for the expanded negotiations on defense and space weapons, strategic nuclear weapons, and intermediate-range nuclear weapons. Consistent with ACDA's statutory authority, ACDA manages the operation of these negotiations under the direction of the President and the Secretary of State. Personnel of this office are detailed by the State Department to ACDA on a reimbursable basis.

The Executive Director of the General Advisory Committee

The Executive Director of the General Advisory Committee (GAC) provides support for the GAC, including White House and Congressional liaison, in the GAC's exercise of broad statutory responsibilities as a Presidential advisory body on arms control and disarmament. (See Appendix VI.)

The US Representative to the Conference on Disarmament

The US Representative to the Conference on Disarmament (CD) with the rank of Ambassador leads the US delegation to the CD in Geneva, the UN Disarmament Commission (UNDC), the United Nations General Assembly (UNGA) First Committee, and, as requested by the Director, also represents him in other negotiations having arms control significance.

The US Commissioner of the US/USSR Standing Consultative Commission

The US Commissioner of the US/USSR Standing Consultative Commission (SCC) is provided administrative and logistical support by ACDA and, under the direction of the President, through the mechanism of the National Security Council, represents the United States in the SCC and heads the US Component of the Commission. He holds the rank of Ambassador.

The Senior Policy Advisor to the Director

The Senior Policy Advisor provides the Director with assessments and other analyses that address longer-term issues relating to arms control and ACDA responsibilities.

The Senior Military Advisor

The Senior Military Advisor provides high-level liaison with the Office of the Secretary of Defense and the Joint Chiefs of Staff in policy formulation, arms control negotiations, and ACDA operations.

Bureau of Strategic Programs

The Bureau of Strategic Programs (SP) formulates and participates in the development of US arms control policy for Presidential approval. SP coordinates with other agencies of the US Government to devise and execute the strategy and tactics for arms control negotiations with the Soviet Union. The Bureau provides organizational support for the Nuclear and Space Talks in Geneva, which include the Strategic Arms Reduction Talks, Intermediate-range Nuclear Forces, and Defense and Space Talks, and chairs the backstopping committees in Washington for these negotiations. In addition, SP organizes and provides backstopping for the twice-yearly meetings of the Standing Consultative Commission, as well as for the five-year review of the Anti-Ballistic Missile Treaty. As part of the support function for all of these arms control fora, SP contributes the major portion of the US diplomatic, advisory and administrative personnel attached to these talks.

The Director of the US Arms Control and Disarmament Agency is advised by SP on all matters related to strategic arms control, including the above negotiations, the Strategic Defense Initiative, and arms control compliance. SP chairs the Defense and Space Interagency Group and is a member of various other administration interagency groups related to strategic arms control.

SP is responsible for consultation and coordination with allied and other foreign governments on US/Soviet arms control negotiations. The Bureau integrates these views into analyses and planning for negotiating positions, and maintains the official record of all such documents related to the negotiations. SP coordinates with other agencies on research and policy studies to support the development of a comprehensive and effective arms control program. The Bureau also conducts external research on the technical and political implications of current and proposed negotiating options. This research supports implementation of existing agreements, ongoing negotiations, and planning for future negotiations.

The Bureau of Strategic Programs is comprised of three divisions: the Strategic Affairs Division, the Theater Affairs Division and the newly created Defense and Space Division.

Bureau of Multilateral Affairs

The Multilateral Affairs (MA) Bureau develops for Presidential approval arms control policy, strategy, and tactics for ongoing multilateral arms limitations negotiations, and provides organizational support, delegation staffing, and Washington backstopping for multilateral negotiations.

Specifically, the Multilateral Affairs Bureau takes the lead within the US Government for the preparation of guidance for, and the backstopping of, US delegations to the Conference on Disarmament, chemical weapons negotiations, the UNDC, and the First Committee of the UNGA, and provides general support to Ambassador Lowitz who heads these delegations. In addition, MA served as the lead in preparing for and backstopping the Second Review Conference of the Biological Weapons Convention (BWC); the US delegation was again led by Ambassador Lowitz. MA provides much of the staffing for these delegations. MA also assists in the preparation of guidance for the Mutual and Balanced Force Reductions (MBFR), Conference on Confidence and Security-Building Measures and Disarmament in Europe (CDE), and Conference on Security and Cooperation in Europe (CSCE) delegations. The current Assistant Director of MA served as the Deputy US Representative during the three years of the Stockholm CDE Conference. MA sent two officers each to MBFR and CSCE delegations.

The Bureau has responsibility for advising and briefing the Director and Deputy Director for their meetings with foreign leaders.

The Bureau has two divisions: International Security Policy (ISP) and Science and Technology Policy (STP). The two divisions are staffed with foreign affairs specialists (both Foreign Service and Civil Service), military officers and physical scientists, and provide most of ACDA's support to multilateral negotiations as well as to consultations with allies. The ISP Division Chief is responsible for backstopping the CD, the UNGA, the UNDC, the CDE, and security aspects of the CSCE, and the MBFR talks. The STP Division Chief is responsible for backstopping negotiations and discussions on chemical weapons, biological weapons, nuclear testing, and outer space.

Bureau of Verification and Intelligence

The Bureau of Verification and Intelligence is responsible for policies and studies dealing with the verifiability of provisions of current and projected arms control agreements. The Bureau also provides operations analysis, intelligence, and computer support for all ACDA's activities. The Bureau is divided into three divisions: the Verification Division which deals with verification and compliance issues, the Operations Analysis Division which performs analytical studies and provides computer support, and the Intelligence Division which performs intelligence studies and provides ACDA with necessary intelligence information.

The Bureau plans, organizes and supervises studies and policy papers prepared within the Agency and reviews those prepared by other organizations dealing with the verifiability of provisions of current and projected arms control agreements; provides for the Director's use the assessments of verifiability and other information called for in the Arms Control and Disarmament Act (as amended); prepares analysis of information pertaining to compliance by other states with existing arms control agreements to which the United States is a party; makes assessments of possible new systems, devices, and capabilities for verification; conducts liaison with intelligence and scientific agencies concerned with systems, techniques, and instruments useful for verification; makes arrangements for and participates in discussions of US and international bodies involved in the verification of and compliance with arms control agreements; and provides intelligence information pertinent to the planning for arms control discussions, the conduct of negotiations, and the assessment of compliance.

Given the critical importance of verification and compliance in November 1982, the President established a high-level committee for oversight of compliance with existing arms control agreements and for assuring the verifiability of agreements being negotiated. The Assistant Director for Verification and Intelligence is a member of the Arms Control Verification Committee (chaired by the Assistant to the President for National Security Affairs) and Co-Chairman of the Analysis Group under this committee. This analysis group has been responsible for the preparation and interagency coordination of four Presidential Compliance Reports.

The Bureau is also responsible for storing and controlling the handling of all documents that contain special intelligence material, for assisting Agency personnel in obtaining the necessary access to sensitive compartmented information, and for disseminating and enforcing all regulations that pertain to discussions, visits, and other exchanges of information that involve special intelligence data. In addition, the Bureau is responsible for the Agency's computer operations.

Bureau of Nuclear and Weapons Control

The Bureau of Nuclear and Weapons Control performs ACDA work and activities on nuclear nonproliferation issues, arms and technology transfers, arms control impact studies, defense economics and economics of arms control, military expenditure recording and analysis, and weapons analyses.

The Bureau is organized into four divisions. The International Nuclear Affairs Division provides advice, assessments, and policy recommendations on the international relations aspects of nonproliferation and has line responsibility for reviewing nuclear exports. The Nuclear Safeguards and Technology Division is concerned with the IAEA safeguards system, nuclear fuel cycles, and the technology aspects of nonproliferation. The Arms Transfer Division assesses the arms control implications of proposed arms transfers. The Defense Programs and Analysis Division is responsible for the annual set of Arms Control Impact Statements, the analysis of weapons technology, the economic analysis of defense programs, the publication of the ACDA Annual Report and the World Military Expenditures and Arms Transfers report, and the inspection provisions of the Antarctic Treaty.

Office of General Counsel

This office is responsible for all matters of domestic and international law relevant to ACDA's work. It provides advice and assistance in drafting and negotiating arms control treaties and agreements, and on questions regarding their approval by Congress, implementation, interpretation, ratification, and revision. Lawyers from the office serve as legal advisers on negotiating delegations, at conferences reviewing past arms control agreements, and at sessions of the SCC.

The office is responsible for legal matters relating to arms control policy formulation and ACDA legislation, including drafting of such legislation. On this and all ACDA substantive legislative matters, the office is responsible for obtaining clearance from, and effecting other necessary liaison with, the Legislative Reference Division, Office of Management and Budget (OMB), and for including Agency reports and opinions on bills introduced in Congress and referred to ACDA by OMB for comment. It also handles the legal aspects of Agency policies and operations in the areas of personnel, ethics, security, patents, contracts, procurement, fiscal, and administrative matters.

Office of Public Affairs

The Office of Public Affairs (PA) is charged with implementing one of the four major tasks assigned to ACDA by law: disseminating information on arms control and disarmament to the public.

To this end the Public Affairs Office carries out three functions. In its "spokesman role", PA works to ensure that the media and other priority audiences have an accurate and complete understanding of US arms control policies. Secondly, this office manages the public affairs activities of ACDA. For example, it aggressively pursues speaking engagements for ACDA officials before private groups -- civic, professional, academic, and others. It publishes a variety of materials for and responds to thousands of information requests annually. Finally, the Office provides the Director and senior Agency officers with advice on public perceptions of US Government arms control positions.

The speakers program is among the most visible manifestations of PA's effort to disseminate information on arms control to the public. The Director, Kenneth L. Adelman, made over 50 public appearances during 1986, before audiences from Australia to Germany to Canada, ranging from debates to panel discussions to speeches.

The Deputy Director, David Emery, was also active in public appearances in the United States and abroad. Thirty-three other ACDA employees were similarly involved in the program, making over 100 appearances at symposia, debates or other meetings on arms control matters.

The majority of the speaking activity was at universities, colleges and secondary schools; less prominent were world affairs councils, United States Information Agency (USIA) sponsored programs and church groups. Speaking engagements of ACDA officials are listed in Appendix IV.

PA represents ACDA on the Public Diplomacy Interagency Group, provides guidance on arms control matters to press spokesmen of other Federal agencies, assists the USIA in preparation of information for use abroad, conducts special programs and conferences for nongovernmental organizations and news media, and arranges and conducts briefings for visiting students and international scholars.

In support of ACDA requirements, PA also manages an extensive library which provides research support to a variety of agencies and individuals. The library maintains a collection of books, periodicals, documents and reference materials on arms control and related subjects.

On a daily basis, PA publishes and distributes "ACDA News," a compilation of pertinent news items. This service enjoys nationwide circulation and is highly prized by researchers, media and private citizens as a valuable, comprehensive reference source. In addition, PA publishes a bi-weekly internal information bulletin, the Intercom, as well as numerous updates of arms control issues.

Audio-visual and photographic support for the agency is also a function of Public Affairs.

The ACDA Historian, a member of the Office of Public Affairs, is responsible for publishing the annual Documents on Disarmament and for preparing and maintaining the history of ACDA.

Office of Congressional Affairs

The Office of Congressional Affairs (OCA) responds to the Congressional interest in arms control and the Geneva negotiations by arranging briefings and consultations as well as individual meetings between ACDA officials and members of Congress and staff. OCA has arranged many arms control seminars for Congressional staff with ACDA officials and frequently with officials from other agencies and departments as well. OCA also works with Congressional committee staffs in arranging hearings at which ACDA officials appear as witnesses. In addition, OCA routinely distributes informational material on arms control issues to members of Congress and their staffs. Periodically, an update of the ACDA Arms Control Issues Book (first published in 1984) is provided to each member's office as well as committee staff.

Office of Administration

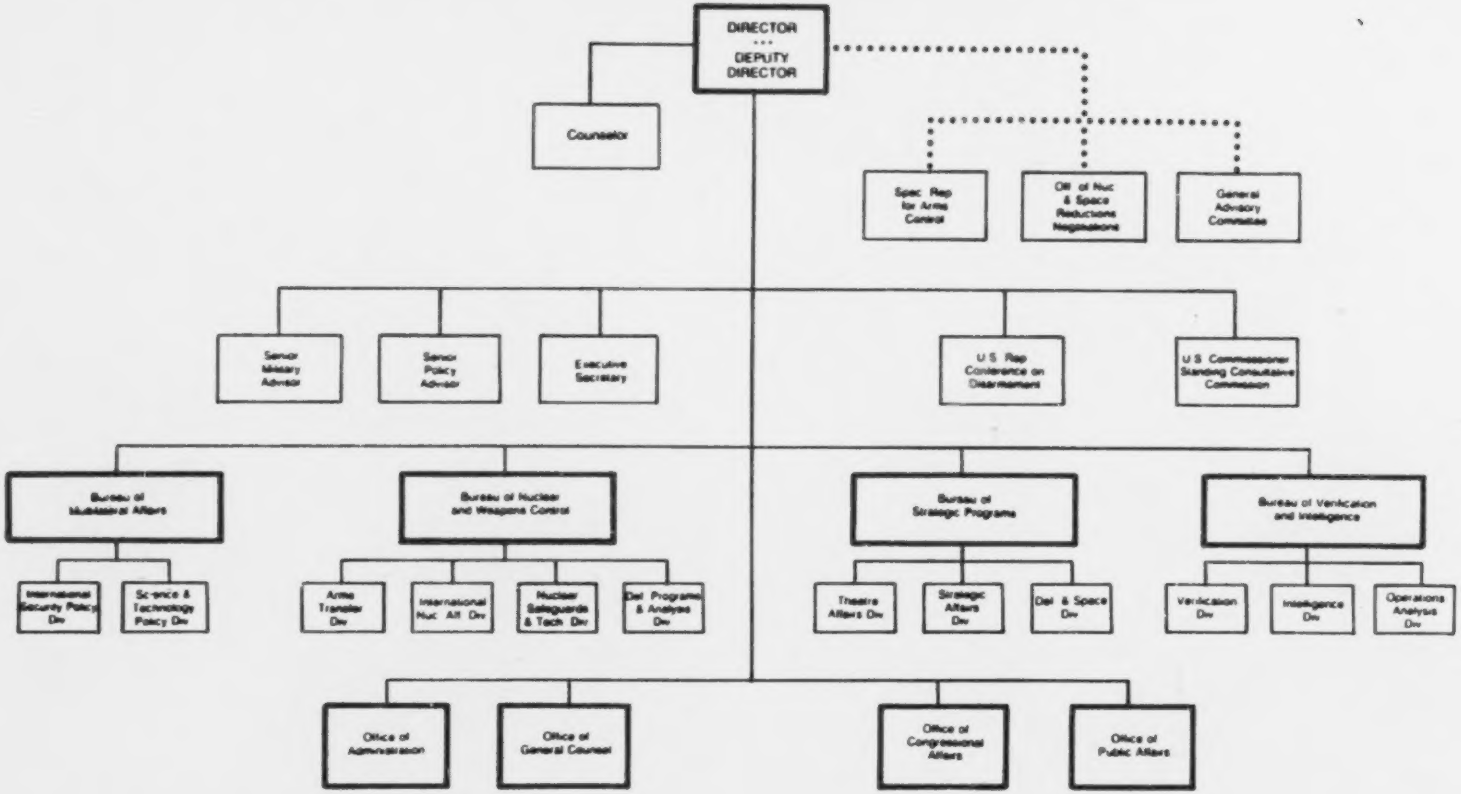
The Office of Administration has responsibility for ACDA's administrative management and for providing support to all of its components, including its negotiating staffs in Geneva, Stockholm, and Vienna.

Management duties include the administration of all personnel, budget, fiscal, supply, security, communications, research contracts, and general activities. The office maintains close liaison with the Department of State, the General Services Administration, and other organizations providing services on behalf of ACDA.

OFFICIALS OF ACDA
(As of December 31, 1986)

DIRECTOR	Kenneth L. Adelman
DEPUTY DIRECTOR	David F. Emery
COUNSELOR	Michael A. Guhin
EXECUTIVE SECRETARY	William B. Staples
US REPRESENTATIVE TO THE CONFERENCE ON DISARMAMENT	Donald S. Lowitz
US COMMISSIONER, STANDING CONSULTATIVE COMMISSION	Richard H. Ellis
SENIOR POLICY ADVISOR TO THE DIRECTOR	Charles Sorrels
EXECUTIVE DIRECTOR, GENERAL ADVISORY COMMITTEE	Vacant
SENIOR MILITARY ADVISOR	Col. Jay W. Kelley, USAF
ASSISTANT DIRECTOR FOR MULTILATERAL AFFAIRS	Lynn M. Hansen
ASSISTANT DIRECTOR FOR NUCLEAR AND WEAPONS CONTROL	Lewis A. Dunn
ASSISTANT DIRECTOR FOR STRATEGIC PROGRAMS	Michael H. Mobbs
ASSISTANT DIRECTOR FOR VERIFICATION AND INTELLIGENCE	Manfred Eimer
GENERAL COUNSEL	Thomas Graham, Jr.
DIRECTOR OF PUBLIC AFFAIRS	Sigmund Cohen
DIRECTOR OF CONGRESSIONAL AFFAIRS	Alison B. Fortier
ADMINISTRATIVE DIRECTOR	William J. Montgomery

UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY


DIRECTOR
...
DEPUTY DIRECTOR
Counselor
Spec. Rep. for Arms Control
Off. of Nuc. & Space Reductions Negotiations
General Advisory Committee
Senior Military Advisor
Senior Policy Advisor
Executive Secretary
U.S. Rep. Conference on Disarmament
U.S. Commissioner Standing Consultative Commission
Bureau of Multilateral Affairs
International Security Policy Div
Science & Technology Policy Div
Bureau of Nuclear and Weapons Control
Arms Transfer Div
International Nuc. Aff. Div
Nuclear Safeguards & Tech. Div
Def. Programs & Analyses Div
Bureau of Strategic Programs
Theatre Affairs Div
Strategic Affairs Div
Def. & Space Div
Bureau of Verification and Intelligence
Verification Div
Intelligence Div
Operations Analysis Div
Office of Administration
Office of General Counsel
Office of Congressional Affairs
Office of Public Affairs

APPENDIXES

APPENDIX I

1986 ARMS CONTROL CHRONOLOGY

Jan. 1 - Expiration of first period of the Soviet self-imposed moratorium on nuclear weapons explosions.

Jan. 15 - Soviets publicly announce plan to eliminate nuclear weapons by 2000.

Jan. 16 - Round IV of the Nuclear and Space Talks (NST) begins in Geneva.

Jan. 16 - Soviet Union extends testing moratorium to March 31 and asks the United States to join.

Jan. 28 - The United States and the Soviet Union begin the first round in Geneva of intensified discussions on a comprehensive ban on chemical weapons (CW).

Jan. 28 - Conference on Confidence and Security-Building Measures and Disarmament in Europe (CDE) resumes in Stockholm.

Jan. 30 - Mutual and Balanced Force Reductions (MBFR) negotiations begin 38th round of talks in Vienna.

Feb. 4 - Conference on Disarmament (CD) winter session begins in Geneva.

Feb. 4 - The Secretary-General of the United Nations addresses the CD.

Feb. 4 - President Reagan announces in State of the Union Address that the United States proposes a radical cut in US-Soviet offensive forces.

Feb. 20 - Warsaw Pact, at MBFR Talks, presents new draft treaty.

Feb. 24 - Statement by President Reagan proposes "a process by which the United States and the Soviet Union would take the first steps in implementing the principle of fifty percent reductions in the nuclear offensive forces of both sides, appropriately applied, and by negotiating an Intermediate-range Nuclear Forces (INF) agreement."

Feb. 26 - President Reagan, in a televised address, states that it would be folly for the United States not to press forward with the Strategic Defense Initiative (SDI) when the Soviet Union has already invested up to twenty years on their own program.

Feb. 26 - US House of Representatives passes a resolution proposing a moritorium on nuclear testing, so long as the Soviet Union continues a testing moritorium.

Mar. 4 - Session XXX of US-USSR Standing Consultative Commision (SCC) convenes in Geneva.

Mar. 4 - NST concludes Round IV.

Mar. 5-6 - The United States and the Soviet Union, in Berne, discuss ways of preventing the spread of chemical weapons.

Mar. 10 - The UN Commission on Human Rights adopts two resolutions calling for the immediate withdrawal of foreign troops from Afghanistan and Cambodia.

Mar. 13 - Round IX of CDE ends in Stockholm.

Mar. 14 - President Reagan announces a new proposal for on-site monitoring of nuclear tests to strengthen verification provisions of the Threshold Test Ban Treaty (TTBT).

Mar. 14 - General Secretary Gorbachev extends the Soviet nuclear testing moratorium to March 31.

Mar. 20 - United States condemns Iraq for use of chemical weapons.

Mar. 29 - President Reagan rejects General Secretary Gorbachev's call for a nuclear testing moratorium.

Mar. 31 - Second period of Soviet moratorium on nuclear explosions ends.

Apr. 15 - Round X of CDE begins in Stockholm.

Apr. 17-18 - NATO disarmament experts meet in Brussels.

Apr. 18 - General Secretary Gorbachev proposes in East Berlin reductions in conventional military forces and tactical nuclear weapons in Europe.

Apr. 20 - CD winter session recesses in Geneva.

Apr. 23 - Session XXX of the SCC ends.

Apr. 28-May 2 - Biological Weapons Convention (BWC) Preparatory Conference is held in Geneva.

May 5 - UN Disarmament Commission (UNDC) opens in New York.

May 5-6 - Nuclear Risk Reduction Center discussions are held in Geneva.

May 8 - Round V of the NST begins in Geneva.

May 14 - USSR extends moratorium on nuclear explosions to August 6.

May 14-15 - NATO Nuclear High-Level Group meets in Charleston, South Carolina.

May 15 - MBFR Round 39 begins in Vienna.

May 23 - Round X of CDE concludes.

May 23 - UNDC ends its session in New York.

May 27 - President Reagan states that the United States will make decisions concerning the deployment of future strategic systems on the basis of the US-Soviet military balance and not on the provisions of the SALT II Treaty.

May 27-28 - Soviet Academy of Sciences sponsors meeting on "Peace and Disarmament" in Moscow.

May 30 - NATO Ministerial Meeting in Halifax establishes a task force to consider the future of conventional arms control in Europe.

Jun. 2-5 - US-USSR nonproliferation consultations are held in Moscow.

Jun. 10 - CD summer session opens in Geneva.

Jun. 10 - Round XI of CDE begins.

Jun. 11 - Warsaw Pact issues "Budapest Appeal" to NATO calling for twenty-five percent cut in NATO-Warsaw Pact troops by the early 1990s.

Jun. 26 - NST Round V ends in Geneva.

Jul. 1 - UN Conference on Disarmament and Development is held in Paris without US participation.

Jul. 3 - MBFR Round 39 ends in Vienna.

Jul. 18 - Round XI of CDE ends.

Jul. 22-30 - Special Session of SCC convenes in Geneva. Soviet Union rejects President Reagan's May 27, 1986, call for the Soviet Union to join the United States in establishing an interim framework of mutual restraint.

Jul. 25 - President Reagan sends letter to General Secretary Gorbachev making clear US preference for total elimination of US and Soviet SRINF missiles.

Jul. 25-31 - US and Soviet nuclear testing experts meet in Geneva.

July 28-Aug. 1 - US-Soviet nonproliferation consultations are held in Moscow.

Aug. 5 - President Reagan reports to Congress on Interim Restraint Policy.

Aug. 6 - Experts (Blackwill/Mikhailov) discuss MBFR progress in Moscow.

Aug. 11-12 - US-Soviet arms control experts meet on NST in Moscow.

Aug. 18-20 - US-Soviet chemical weapons specialists meet in Geneva.

Aug. 19 - CDE opens final session.

Aug. 25 - Round II of talks on Risk-Reduction Centers are held in Geneva.

Aug. 29 - CD summer session ends.

Sep. 4-5 - US-Soviet chemical weapons specialists meet in Berne.

Sep. 4-17 - US-Soviet nuclear testing experts meet in Geneva.

Sep. 5-6 - US-Soviet arms control experts meet on NST in Washington.

Sep. 8-26 - BWC Review Conference is held in Geneva.

Sept. 16 - Session 41 of the United Nations General Assembly opens in New York.

Sept. 18 - NST Round VI resumes in Geneva.

Sept. 19 - CDE's final session ends in Stockholm; agreement reached on Confidence and Security-Building Measures (CSBMs).

Sept. 19-20 - Soviet Foreign Minister Edward Shevardnadze visits Washington.

Sept. 20 - Reagan-Gorbachev meeting in Iceland announced.

Sept. 22 - President Reagan addresses the UN General Assembly; makes new comprehensive NST proposal.

Sept. 25 - Round 40 of MBFR opens in Vienna.

Sept. 24-25 - Special International Atomic Energy Agency (IAEA) General Conference on Nuclear Safety is held in Vienna.

Oct. 1 - Chemical Weapons Report issued; it describes results of NATO consultations concerning CW deterrent posture.

Oct. 1 - SCC begins Round XXXII in Geneva.

Oct. 11-12 - President Reagan and General Secretary Gorbachev meet in Reykjavik, Iceland.

Oct. 13 - UNGA First Committee begins work.

Oct. 20 - ACDA Director addresses UNGA First Committee on Reykjavik results.

Oct. 21-22 - Nuclear Planning Group meeting held in Glenneagles, Scotland

Oct. 24-26 - Palme Commission meets in Budapest, Hungary.

Oct. 27 - US-Soviet chemical weapons specialists begin meeting in New York.

Nov. 4 - CSCE Review Conference begins in Vienna.

Nov. 5-6 - Secretary of State Schultz and Soviet Foreign Minister Shevardnadze meet in Vienna.

Nov. 6 - Atlantic Conference on East/West Relations is held in Paris.

Nov. 10-14 - IAEA International Symposium on Nuclear Material Safeguards occurs in Vienna.

Nov. 12 - US-Soviet chemical weapons specialists end meeting in New York.

Nov. 12 - NST Round VI ends in Geneva.

Nov. 13-25 - US-Soviet nuclear testing experts meet in Geneva.

Nov. 13 - SCC Round XXXII ends.

Dec. 2-5 - NST experts meet in Geneva for _ad referendum_ talks to define areas of agreement and disagreement.

Dec. 4 - MBFR Round 40 ends in Vienna

Dec. 11 - NATO Ministerial meeting in Brussels issues Declaration on Conventional Arms Control calling for NATO-Warsaw Pact discussions on a new mandate for conventional arms control in the whole of Europe.

Dec. 15-18 - US-Soviet nonproliferation consultations are held in Washington.

Dec. 19 - Session 41 of the UNGA ends.

Appendix II

BILATERAL ARMS CONTROL RELATED AGREEMENTS CONCLUDED BETWEEN THE UNITED STATES AND THE SOVIET UNION June 1963 - December 1986

	Signed	Entered Into Force
"Hot Line" Agreement	6/20/63	6/20/63
"Hot Line" Improvement and Modernization Agreement	9/30/71	9/30/71
Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War	9/30/71	9/30/71
Agreement on Prevention of Incidents On and Over the High Seas	5/25/72	5/25/72
ABM Treaty	5/26/72	10/3/72
Interim Agreement on the Limitation of Strategic Offensive Arms	5/26/72	10/3/72*
Memorandum of Understanding Regarding Establishment of a Standing Consultative Commission	12/21/72	12/21/72
Protocol to the Agreement of May 25, 1972, on Prevention of Incidents On and Over the High Seas	5/22/73	5/22/73
Agreement on Prevention of Nuclear War	6/22/73	6/22/73
Protocol to the ABM Treaty	7/3/74	5/24/76
Threshold Test Ban Treaty	7/3/74	
Treaty on the Limitation of Underground Nuclear Explosions for Peaceful Purposes	5/28/76	
Treaty on the Limitation of Strategic Offensive Arms	6/18/79**	
Agreement for Improving 1963 and 1971 Direct Communication Link ("Hot Line")	7/17/84	7/17/84

---

*Expired by its terms on October 3, 1977

**If the Treaty had entered into force, it would have expired by its terms on December 31, 1985.

Appendix III

STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS
as of December 1986

P--Party
S--Signatory

	Antarctic Treaty	Limited Test Ban Treaty	Outer Space Treaty	No Nuclear Weapons in Latin America	Nuclear Non-Proliferation Treaty	Seabed Arms Control Treaty	Geneva Protocol	Biological Weapons Convention	Environmental Modification Convention
Agreement Opened for Signature	12/1/59	8/5/63	1/27/67	2/14/67	7/1/68	2/11/71	6/17/25	4/10/72	5/18/77
Agreement Entered into Force	6/23/61	10/10/63	10/10/67	4/22/68	3/5/70	5/18/72	2/8/28	3/26/75	10/5/78
COUNTRY									
Afghanistan		P	S		P	P		P	
Algeria		S							
Antigua and Barbuda			P (1)	P	P (1)	P (1)	P (1)		P (1)
Argentina	P	P	P	S		P	P	P	P
Australia	P	P	P		P	P	P	P	P
Austria		P	P		P	P	P	P	
The Bahamas		P	P	P	P		P (1)		
Bangladesh		P	P		P			P	P
Barbados			P	P	P		P	P	
Belgium	P	P	P		P	P	P	P	P
Belize					P		P (1)		
Benin		P	P		P	P		P	P
Bhutan		P			P		P	P	
Bolivia		P	S	P	P	S	P	P	S
Botswana		P	S		P	P	P (1)	S	
Brazil	P	P	P	S(2)		S	P	P	P
Brunei			P (1)		P (1)	P (1)		P (1)	P (1)
Bulgaria	P	P	P		P	P	P	P	P
Burkina		S	P		P		P		
Burma		P	P			S	P	S	
Burundi		S	S		P	S		S	
Byelorussian SSR		P	P			P		P	P
Cambodia					P		P	P	
Cameroon		S	S		P	S			
Canada		P	P		P	P	P	P	P

Appendix III
STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS
as of December 1986 (Continued)

P--Party
S--Signatory

	Antarctic Treaty	Limited Test Ban Treaty	Outer Space Treaty	No Nuclear Weapons in Latin America	Nuclear Non-Proliferation Treaty	Seabed Arms Control Treaty	Geneva Protocol	Biological Weapons Convention	Environmental Modification Convention
Agreement Opened for Signature	12/1/59	8/5/63	1/27/67	2/14/67	7/1/68	2/11/71	6/17/25	4/10/72	5/18/77
Agreement Entered into Force	6/23/61	10/10/63	10/10/67	4/22/68	3/5/70	5/18/72	2/8/28	3/26/75	10/5/78
COUNTRY									
Cape Verde		P			P	P		P	P
Central African Republic		P	S		P	P	P	S	
Chad		P			P				
Chile	P	P	P	S (2)			P	S	
China	P		P	P (3)			P	P	
Colombia		P	S	P	P	S		P	
Congo (Brazzaville)					P	P		P	
Costa Rica		P		P	P	S		P	
Cuba	P		P			P	P	P	P
Cyprus		P	P		P	P	P	P	P
Czechoslovakia	P	P	P		P	P	P	P	P
Denmark	P	P	P		P	P	P	P	P
Dominica			P (1)		P	P (1)	P (1)	P (1)	P (1)
Dominican Republic		P	P	P	P	P	P	P	
Ecuador		P	P	P	P		P	P	
Egypt		P	P		P		P	S	P
El Salvador		P	P	P	P		S	S	
Equatorial Guinea					P	S			
Estonia							P		
Ethiopia		S	S		P	P	P	P	S
Fiji		P	P		P		P	P	
Finland	P	P	P		P	P	P	P	P
France	P		P	P(3)S(4)			P	P	

Appendix III

STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS
as of December 1986 (Continued)

P--Party
S--Signatory

	Antarctic Treaty	Limited Test Ban Treaty	Outer Space Treaty	No Nuclear Weapons in Latin America	Nuclear Non-Proliferation Treaty	Seabed Arms Control Treaty	Geneva Protocol	Biological Weapons Convention	Environmental Modification Convention
Agreement Opened for Signature	12/1/59	8/5/63	1/27/67	2/14/67	7/1/68	2/11/71	6/17/25	4/10/72	5/18/77
Agreement Entered into Force	6/23/61	10/10/63	10/10/67	4/22/68	3/5/70	5/18/72	2/8/28	3/26/75	10/5/78
COUNTRY									
Gabon		P			P			S	
Gambia		P	S		P	S	P	S	
German Democratic Republic	P	P	P		P	P	P	P	P
Germany, Federal Republic of	P	P	P		P	P	P	P	P
Ghana		P	S		P	P	P	P	P
Greece		P	P		P	P	P	P	P
Grenada			P (1)	P	P	P (1)	P (1)		
Guatemala		P		P	P	S		P	
Guinea					P	S			
Guinea-Bissau			P		P	P		P	
Guyana			S				P (1)	S	
Haiti		S	S	P	P			S	
Holy See			S		P		P		S
Honduras		P	S	P	P	S		P	
Hungary	P	P	P		P	P	P	P	P
Iceland		P	P		P	P	P	P	S
India	P	P	P			P	P	P	P
Indonesia		P	S		P		P	S	
Iran		P	S		P	P	P	P	S
Iraq		P	P		P	P	P	S	S
Ireland		P	P		P	P	P	P	P
Israel		P	P				P		
Italy	P	P	P		P	P	P	P	P
Ivory Coast		P			P	P	P	S	

Appendix III

STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS
as of December 1986 (Continued)

P--Party
S--Signatory

	Antarctic Treaty	Limited Test Ban Treaty	Outer Space Treaty	No Nuclear Weapons in Latin America	Nuclear Non-Proliferation Treaty	Seabed Arms Control Treaty	Geneva Protocol	Biological Weapons Convention	Environmental Modification Convention
Agreement Opened for Signature	12/1/59	8/5/63	1/27/67	2/14/67	7/1/68	2/11/71	6/17/25	4/10/72	5/18/77
Agreement Entered into Force	6/23/61	10/10/63	10/10/67	4/22/68	3/5/70	5/18/72	2/8/28	3/26/75	10/5/78
COUNTRY									
Jamaica		S	P	P	P	P	P	P	
Japan	P	P	P		P	P	P	P	P
Jordan		P	S		P	P	P	P	
Kenya		P	P		P		P	P	
Kiribati					P		P (1)		
Korea		P	P		P	S		S	
Korea, (Dem. People's Rep.)									P
Kuwait		P	P		S		P	P	P
Laos		P	P		P	P		P	P
Lativa							P		
Lebanon		P	P		P	S	P	P	S
Lesotho			S		P	P	P	S	
Liberia		P			P	S	P	S	S
Libya		P	P		P		P	P	
Liechtenstein					P				
Lithuania							P		
Luxembourg		P	S		P	P	P	P	S
Madagascar		P	P		P	S	P	S	
Malawi		P			P		P	S	P
Malaysia		P	S		P	P	P	S	
Maldives					P		P		
Mali		S	P		P	S	P	S	
Malta		P			P	P	P	P	
Mauritania		P							

Appendix III
STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS
as of December 1986 (Continued)

P--Party S--Signatory	Antarctic Treaty	Limited Test Ban Treaty	Outer Space Treaty	No Nuclear Weapons in Latin America	Nuclear Non-Proliferation Treaty	Seabed Arms Control Treaty	Geneva Protocol	Biological Weapons Convention	Environmental Modification Convention
Agreement Opened for Signature	12/1/59	8/5/63	1/27/67	2/14/67	7/1/68	2/11/71	6/17/25	4/10/72	5/18/77
Agreement Entered into Force	6/23/61	10/10/63	10/10/67	4/22/68	3/5/70	5/18/72	2/8/28	3/26/75	10/5/78
COUNTRY									
Mauritius		P	P		P	P	P	P	
Mexico		P	P	P	P	P	P	P	
Monaco							P		
Mongolia		P	P		P	P	P	P	P
Morocco		P	P		P	P	P	S	S
Nauru					P				
Nepal		P	P		P	P	P	S	
Netherlands	P	P	P	P (4)	P	P	P	P	P
New Zealand	P	P	P		P	P	P	P	P
Nicaragua		P	S	P	P	P	S	P	S
Niger		P	P			P	P	P	
Nigeria		P	P		P		P	P	
Norway	P	P	P		P	P	P	P	P
Pakistan		S	P				P	P	P
Panama		P	S	P	P	P	P	P	
Papua New Guinea	P	P	P		P		P	P	P
Paraguay		S		P	P	S	P	P	
Peru	P	P	P	P	P		P	P	
Philippines		P	S		P		P	P	
Poland	P	P	P		P	P	P	P	P
Portugal		S			P	P	P	P	S
Qatar						P	P	P	
Romania	P	P	P		P	P	P	P	P
Rwanda		P	S		P	P	P	P	
St Christopher-Nevis			P (1)		P (1)	P (1)	P (1)		P (1)
Saint Lucia			P (1)		P	P (1)	P (1)		P (1)

Appendix III
STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS
as of December 1986 (Continued)

P--Party
S--Signatory

	Antarctic Treaty	Limited Test Ban Treaty	Outer Space Treaty	No Nuclear Weapons in Latin America	Nuclear Non-Proliferation Treaty	Seabed Arms Control Treaty	Geneva Protocol	Biological Weapons Convention	Environmental Modification Convention
Agreement Opened for Signature	12/1/59	8/5/63	1/27/67	2/14/67	7/1/68	2/11/71	6/17/25	4/10/72	5/18/77
Agreement Entered into Force	6/23/61	10/10/63	10/10/67	4/22/68	3/5/70	5/18/72	2/8/28	3/26/75	10/5/78
COUNTRY									
St. Vincent and the Grenadines					P (1)	P (1)	P (1)		P (1)
San Marino		P	P		P			P	
Sao Tome and Principe					P	P		P	P
Saudi Arabia			P			P	P	P	
Senegal		P			P	S		P	
Seychelles		P	P		P	P	P (1)	P	
Sierra Leone		P	P		P	S	P	P	S
Singapore		P	P		P	P	P (1)	P	
Solomon Islands			P (1)		P	P (1)	P (1)	P (1)	
Somalia		S	S		P			S	P
South Africa	P	P	P			P	P	P	
Spain		P	P				P	P	P
Sri Lanka	P	P	P		P		P	P	P
Sudan		P			P	S	P		
Suriname				P	P		P (1)		
Swaziland		P	P (1)		P	P	P (1)		
Sweden	P	P	P		P	P	P	P	P
Switzerland		P	P		P	P	P	P	
Syrian Arab Republic		P	P		P		P	S	S
Tanzania		P				S	P	S	
Thailand		P	P		P		P	P	
Togo		P	S		P	P	P	P	
Tonga		P	P		P		P	P	

Appendix III

STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS

as of December 1986 (Continued)

P--Party S--Signatory	Antarctic Treaty	Limited Test Ban Treaty	Outer Space Treaty	No Nuclear Weapons in Latin America	Nuclear Non-Proliferation Treaty	Seabed Arms Control Treaty	Geneva Protocol	Biological Weapons Convention	Environmental Modification Convention
Agreement Opened for Signature	12/1/59	8/5/63	1/27/67	2/14/67	7/1/68	2/11/71	6/17/25	4/10/72	5/18/77
Agreement Entered into Force	6/23/61	10/10/63	10/10/67	4/22/68	3/5/70	5/18/72	2/8/28	3/26/75	10/5/78
COUNTRY									
Trinidad and Tobago		P	S	P	P		P		
Tunisia		P	P		P	P	P	P	P
Turkey		P	P		P	P	P	P	S
Tuvalu					P		P (1)		
Uganda		P	P		P		P		S
Ukrainian SSR		P	P			P		P	P
Union of Soviet Socialist Republics	P	P	P	P (3)	P	P	P	P	P
United Arab Emirates								S	
United Kingdom	P	P	P	P(3)(4)	P	P	P	P	P
United States	P	P	P	P(3)(4)	P	P	P	P	P
Uruguay	P	P	P	P	P	S	P	P	
Venezuela		P	P	P	P		P	P	
Viet Nam, Socialist Republic of			P		P	P	?	P	P
Western Samoa		P			P				
Yemen (Aden)		P	P		P	P		P	P
Yemen (Sana)		S			P	S	P	S	P
Yugoslavia		P	S		P	P	P	P	
Zaire		P	S		P			P	S
Zambia		P	P			P	P (1)		
Zimbabwe							P (1)		
TOTAL*	32P	114P 13S	96P 29S	29P 3S	135P 1S	84P 24S	128P 2S	103P 28S	56P 17S

* Includes parties that have generally to treaty obligations.

Taiwan (5)		P	P		P	P	P	P	

Appendix III
STATUS OF MULTILATERAL ARMS CONTROL AGREEMENTS
as of December 1986 (Continued)

Footnotes

(1) Based on general declarations concerning treaty obligations applicable prior to prior to independence.

(2) Also ratified subject to preconditions not yet met.

(3) Additional Protocol II

(4) Additional Protocol I

(5) Instruments of ratification/adherence to these treaties have been deposited in the name of the Republic of China. Effective January 1, 1979, the United States recognized the Goverment of the People's Republic of China as the sole legal government of China.

Appendix IV

PUBLIC AFFAIRS APPEARANCES BY SENIOR ACDA OFFICIALS IN 1986

Public Appearances By The Director

Academic Fora

March 6 - Congressional Youth Leadership Council, Washington, DC

March 16 - Center for the Study of the Presidency, Student Symposium, Washington, DC

May 1 - Fordham University, New York, NY

May 6 - American University, Washington, DC

May 15 - Stanford University, Stanford, CA

May 20 - Southern Center for International Studies, Georgia Tech Symposium, Atlanta, GA

November 13 - Princeton University, Princeton, NJ

November 20 - Congressional Youth Leadership Council, Washington, DC

December 8 - George Washington University, Washington, DC

Foreign Affairs Organizations

February 18 - Philadelphia World Affairs Council and the Foreign Policy Research Institute, Philadelphia, PA

March 21 - American Security Council, Lake Buena Vista, FL

May 14 - California Seminar on International Security and Foreign Policy, Los Angeles, CA

May 16 - Commonwealth Club, San Francisco, CA

June 5 - Citizens for America, Washington, DC

June 8 - Committee on the Free World, Milwaukee, WI

August 31 - American Foreign Legion Conference, Cincinnati, OH

September 2 - Women for a Meaningful Summit, Washington, DC

September 12 - Meeting with VFW Commander-in-Chief, Washington, DC

September 18 - Ambassadorial Seminar, Department of State, Washington, DC

September 23 - National Women's Coalition, the White House, Washington, DC

October 2 - Committee on the Present Danger, Washington, DC

October 25 - Young Political Leaders, Washington, DC

October 27 - Washington Council on Foreign Relations, Washington, DC

October 30 - Washington World Affairs Council, Washington, DC

Research Institutes

April 23 - Center for Strategic and International Studies, New York, NY

May 7 - Institute for East/West Security Studies, Washington, DC

May 15 - Lawrence Livermore National Laboratories, Livermore, CA

October 1 - Lehrman Seminar, SAIS, Washington, DC

October 28 - Lehrman Institute, New York, NY

December 17 - Lehrman Institute, New York, NY

Major Media Events

January 14 - National Press Club, Washington, DC

April 2-3 - Aspen Institute Seminar for Media, Wye Plantation, MD

September 10-11 - Aspen Seminar for Foreign Journalists, Wye Plantation, MD

September 12 - National Press Club, Washington, DC

September 16 - Larry King Radio Show, Arlington, VA

November 19 - Sperling Breakfast, Washington, DC

Other

February 28-March 1 - Wehrkunde Conference, Munich, FRG

May 22 - Consultations, Ottawa, Canada

May 29 - Senior Seminar, Foreign Service Institute, Rosslyn, VA

June 19 - A.B. Laffer Conference, Washington, DC

June 26-28 - Young Presidents Organization, Palo Alto, CA

July 15 - SDI Conference, Washington, DC

July 17 - Girls Nation, Washington, DC

August 12 - American Bar Asociation Annual Meeting, New York, NY

October 20 - UN First Committee, New York, NY

October 21 - American Stock Exchange, Washington, DC

October 24 - OPM Executive Forum, Washington, DC

November 24 - ACDA Reception for 25th Anniversary, Washington, DC

December 8 - Council of American Ambassadors, Washington, DC

December 10 - San Antonio Annual Chamber of Commerce Dinner, San Antonio, TX.

Public Appearances by Other ACDA Officials

Academic

-Triangle University Seminar, Durham, NC
-Columbia University, New York, NY
-Foreign Service Institute, Washington, DC
-Air War College, Maxwell AFB, Montgomery, AL
-State University of New York, Purchase, NY
-Salve Regina-Newport College, Newport, RI
-Kennedy Library, Boston, MA
-Cornell Law School, Ithaca, NY
-University of Michigan, Ann Arbor, MI
-Pennsylvania State University, McKeesport, PA
-Command & General Staff College, Ft. Leavenworth, KS
-University of Miami, Miami, FL
-Armed Forces Staff College, Norfolk, VA
-Defense Intelligence College, Washington, DC
-Woodbridge Senior High School, Woodbridge, VA
-Goucher College, Baltimore, MD
-Mount Union College, Alliance, OH
-William & Mary College, Williamsburg, VA
-American University, Washington, DC
-National Cathedral School, Washington, DC
-Massachusetts Institute of Technology, Cambridge, MA
-Regis College, Denver, CO
-Duke University, Durham, NC
-University of Wisconsin, LaCrosse, WI

June 19 - A.B. Laffer Conference, Washington, DC

June 26-28 - Young Presidents Organization, Palo Alto, CA

July 15 - SDI Conference, Washington, DC

July 17 - Girls Nation, Washington, DC

August 12 - American Bar Asociation Annual Meeting, New York, NY

October 20 - UN First Committee, New York, NY

October 21 - American Stock Exchange, Washington, DC

October 24 - OPM Executive Forum, Washington, DC

November 24 - ACDA Reception for 25th Anniversary, Washington, DC

December 8 - Council of American Ambassadors, Washington, DC

December 10 - San Antonio Annual Chamber of Commerce Dinner,
San Antonio, TX.

Public Appearances by Other ACDA Officials

Academic

-Triangle University Seminar, Durham, NC
-Columbia University, New York, NY
-Foreign Service Institute, Washington, DC
-Air War College, Maxwell AFB, Montgomery, AL
-State University of New York, Purchase, NY
-Salve Regina-Newport College, Newport, RI
-Kennedy Library, Boston, MA
-Cornell Law School, Ithaca, NY
-University of Michigan, Ann Arbor, MI
-Pennsylvania State University, McKeesport, PA
-Command & General Staff College, Ft. Leavenworth, KS

-University of Miami, Miami, FL
-Armed Forces Staff College, Norfolk, VA
-Defense Intelligence College, Washington, DC
-Woodbridge Senior High School, Woodbridge, VA
-Goucher College, Baltimore, MD
-Mount Union College, Alliance, OH
-William & Mary College, Williamsburg, VA
-American University, Washington, DC
-National Cathedral School, Washington, DC
-Massachusetts Institute of Technology, Cambridge, MA
-Regis College, Denver, CO
-Duke University, Durham, NC
-University of Wisconsin, LaCrosse, WI
-University of Connecticut, Storrs, CT
-Hammonasset School, Madison, CT
-Parker Senior High School, Washington, DC
-Tufts University, Medford, MA
-National Defense University, Washington, DC
-University of Califorinia, Santa Barbara, CA
-Georgetown Leadership Conference, Washington, DC
-Southern Maine University, Portland, ME
-Indiana State University, Terre Haute, IN
-Iowa State University, Ames, IO

International

-Ditchley Foundation, Oxford, UK
-United States-Canada Institute, Rome, IT
-European Parliamentarians, Strasburg, FR
-NATO Defense College, Rome, IT
-Symposium on Global Security, Florence, IT
-Oxford University, Oxford, UK

Business & Religious Fora

-George Meany Foundation, Silver Spring, MD.
-New York Bar Association, New York, NY
-Technical Marketing Society of America, Los Angeles, CA
-Episcopal Symposium, Little Rock, AK
-Great Lakes Women's Forum, Detroit, MI
-American Association of University Women, Charlottesville, VA
-League of Women Voters, Hagerstown, MD
-Women's Civic Club, Frederick, MD
-Cosmos Club, Washington, DC
-American Association for The Advancement of Science Symposium, Philadelphia, PA
-Producers Advisory Forum, Washington, DC
-Scientists Institute for Public Information, Madison, WI
-Trinity Conference, Santa Fe, NM
-Panhandle Peace Project, Shepardstown, WV
-Public Relations Society of America, Washington, DC
-American Friends Service Committee, Washington, DC
-Contel, Inc., Washington, DC
-Bethesda Peace Forum, Bethesda, MD

Consulting Organizations

-Institute for Political Studies, Washington, DC
-Institute for Foreign Policy Analysis, Washington, DC
-Washington Center, Washington, DC
-William Penn House, Washington, DC
-Marshal Fund Fellows, Washington, DC
-President's Committee on Executive Exchange, Washington, DC
-Carnegie Council, New York, NY

Foreign Affairs

-Coalition on Nuclear Disarmament, Princeton, NJ
-Milwaukee World Affairs Council, WI
-East Texas World Affairs Council, Tyler, TX
-Program for Information Exchange Forum, Washington, DC
-Spokane World Affairs Council, Spokane, WA
-World Affairs Center, Hartford, CT
-Georgetown Model UN, Washington, DC
-US Security Policies, Washington, DC
-Terrytown Symposium, Terrytown, NY
-Institute of World Affairs, Ames, Iowa
-Institute for Political Analysis, Washington, DC
-Baltimore Council on Foreign Relations, Baltimore, MD
-Pacific Coast Council, Latin American Studies, Los Angeles, CA
-Colorado Springs World Affairs Council, Colorado Springs, CO
-Orange County World Affairs Council, Los Angeles, CA

Appendix V

CONGRESSIONAL COMMITTEE HEARINGS, BRIEFINGS AND CONSULTATIONS IN 1986

Date	Title	ACDA Official	Committee
Jan. 14	CW Arms Control	Archelaus Turrentine	HFAC
Jan. 14	Nuclear Testing	Robert Barker	SASC
Jan. 23	NST Negotiations	Lucas Fischer Victor Alessi	HFAC
Jan. 30	MBFR	Archelaus Turrentine Lucas Fischer	SSCI
Feb. 7	Nuclear Testing Seminar	Robert Barker	Senate Staff
Feb. 20	Nuclear Testing Seminar	Robert Barker	House Staff
Feb. 27	ACDA Appropriations	Kenneth L. Adelman	HAC
Feb. 27	CW Arms Control	Archelaus Turrentine	SASC
Feb. 28	NST Negotiations	Lucas Fischer	SSCI
Mar. 11	Soviet Noncompliance	Manfred Eimer	SSCI
Mar. 12	CW Arms Control	David Emery	HASC
Mar. 21	Nuclear Testing Seminar	Robert Barker	Senate Staff
Mar. 25	CDE	Archelaus Turrentine	SFRC
Mar. 26	ACDA Appropriations	Kenneth L. Adelman	SAC
Mar. 27	Nuclear Testing Seminar	Robert Barker	Senate Staff
Apr. 9	CW Arms Control	David Emery	SASC

Date	Title	ACDA Official	Committee
Apr. 16	NST Negotiations Seminar	Michael Mobbs	Senate Staff
Apr. 29	Nuclear Testing	Kenneth L. Adelman Robert Barker	SASC
May 8	CW Arms Control	Amb. Donald Lowitz	HASC
May 8	Nuclear Testing	Robert Barker	SFRC
May 12	Non-Proliferation	Lewis Dunn	House Staff
May 16	Nuclear Testing Seminar	Robert Barker	House Staff
June 3	NST Negotiations	Louis Nosenzo	HFAC
June 5	Compliance	Manfred Eimer	HFAC
June 10	Verification	Archelaus Turrentine	HPSCI
June 12	Interim Restraint Mark-	Michael Mobbs	HFAC
June 17	Interim Restraint	Kenneth L. Adelman	House Repub. Policy
July 21	SCC Special Session	Michael Mobbs	HFAC
July 23	Public Diplomacy	Kenneth L. Adelman	HFAC
July 25	CW Arms Control Seminar	Archelaus Turrentine	House Staff
Aug. 12	Confirmation Hearing	Lynn Hansen	SFRC
Oct. 20	Reykjavik Briefing	Louis Nosenzo	CSCE Staff
Nov. 14	Verification	Manfred Eimer	HPSCI

Appendix VI

GENERAL ADVISORY COMMITTEE

The Arms Control and Disarmament Act (September 1961) provided for the appointment by the President of a General Advisory Committee to advise the ACDA Director on arms control and disarmament policy and activities and, from time to time, to advise the President, the Secretary of State, and the ACDA Director respecting matters affecting disarmament, world peace, and world law.

The 1986 General Advisory Committee consisted of the following members:

Colin Spencer Gray. President of the National Institute for Public Policy in Virginia. Formerly Director of National Security Studies at the Hudson Institute in New York.

Roland F. Herbst. Associated with R&D Associates, Marina del Rey, California, since 1971. Formerly Deputy Director, Defense Research and Engineering (Space and Strategic Systems), Office of Secretary of Defense.

Francis P. Hoeber. President of Hoeber Corporation, Arlington, Virginia, since 1974. Formerly with the Rand Corporation (1968-1974) and the Stanford Research Institute (1960-1968).

Robert B. Hotz. Senior Editorial Consultant for McGraw-Hill Publications. Author and lecturer. Formerly editor-in-chief and publisher of Aviation Week and Space Technology magazine.

Eli S. Jacobs. A private businessman in Los Angeles, California.

Charles Burton Marshall. Resident consultant, Systems Planning Corporation, Arlington, Virginia. Formerly staff consultant to the House Committee on Foreign Affairs, member of State Department Policy Planning staff, Professor of International Politics at Johns Hopkins School of Advanced International Studies, Washington, DC.

Jaime Oaxaca. President, Wilcox Electric, Incorporated, Kansas City, Missouri.

John P. Roche. Academic Dean and Professor of Civilization and Foreign Affairs at the Fletcher School of Law and Diplomacy, Tufts University, Medford, Massachusetts. Formerly consultant to the Vice President of the United States and the Department of State (1964-1966), and Special Consultant to the President (1966-1968).

Harriet Fast Scott. Author and lecturer. Consultant on Soviet military and political-military affairs to various research institutions and government organizations. Formerly with Stanford Research Institute.

Appendix VII

ACDA APPROPRIATIONS FOR FISCAL YEAR 1986

The Agency's FY 1986 salary and expense appropriation was $24,738,000.

Appendix VIII

COMMEMORATIVES ON THE UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY'S TWENTY-FIFTH ANNIVERSARY

The House of Representatives passed a resolution on September 25, 1986, commemorating ACDA's twenty-fifth anniversary. A copy of that resolution, H. Res. 551, appears on the following page.

President Reagan addressed a letter of congratulations to the staff of ACDA on November 24, 1986, with respect to ACDA's twenty-fifth anniversary. A copy of that letter appears after the House of Representatives resolution.

99TH CONGRESS
2D SESSION

H. RES. 551

Commemorating the 25th anniversary of the Arms Control and Disarmament Agency.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 16, 1986

Mr. FASCELL (for himself and Mr. BROOMFIELD) submitted the following resolution; which was referred to the Committee on Foreign Affairs

RESOLUTION

Commemorating the 25th anniversary of the Arms Control and Disarmament Agency.

Whereas the United States Arms Control and Disarmament Agency was proposed by President John F. Kennedy and was established by an Act of Congress on September 26, 1961;

Whereas the Arms Control and Disarmament Agency is the only agency of the United States Government charged by the Congress with primary responsibility for making arms control an integral part of United States national security policy;

Whereas the Arms Control and Disarmament Agency is the principal agency of the United States Government entrusted to provide impetus to world peace by dealing with the reduction and control of armaments, with the ultimate goal being world disarmament;

Whereas over the past 25 years, the Arms Control and Disarmament Agency has dutifully performed its responsibility to advise the President, the Secretary of State, and the heads of other government agencies on United States arms control and disarmament policy, and has contributed positively to United States national security policy; and

Whereas the national security and well-being of this Nation and other nations have been served by the prominent role of the Arms Control and Disarmament Agency in fostering understanding and agreements between nations on critical arms control issues: Now, therefore, be it

Resolved, That the House of Representatives commends the United States Arms Control and Disarmament Agency, on the occasion of the 25th anniversary of its establishment, for its service to our Nation and to world peace.

THE WHITE HOUSE
WASHINGTON

November 24, 1986

Twenty five years ago the Arms Control and Disarmament Agency was established by Congress to emphasize America's commitment to explore every avenue for building a more stable peace. In his 1961 address to the United Nations, President John F. Kennedy cited the creation of ACDA as one symbol of our determination "to find an approach to disarmament which would be so far-reaching yet realistic, so mutually balanced and beneficial, that it could be accepted by every nation."

These principles, elaborated in the complex negotiations on arms control issues that have taken place in the past quarter century, still form the core of the American commitment expressed by the existence of ACDA. Over the years ACDA has accumulated expertise and resources that have been invaluable to the efforts of six successive Presidents in protecting our national security and preserving peace with freedom. We can be proud of the progress ACDA has helped make possible. Our freedoms are strong, and America is at peace. But much remains to be accomplished.

Today we are engaged in accelerated efforts to achieve deep, equitable, and verifiable arms reductions. Our negotiators are involved in a tireless search for common ground with our adversaries. As we celebrate this milestone, then, and recognize the dedication, energy and professionalism of the people of ACDA, we have occasion to rededicate ourselves to its original purposes.

The staff of ACDA carry with them on their job mankind's highest aspirations. That is a privilege and a responsibility of the first order. In the months ahead, I will continue to rely on you and your colleagues for counsel, hard work and support. America, and friends of freedom everywhere, will continue to rely on you as guardians and servants of all that we hold dear.

Congratulations to all of you on ACDA's 25th Anniversary.